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PART I.—ESSAYS, MONOGRAPHS, AND CASES.

Analysis of supposed blood-stains found upon the clothes of Francis Dick, who was executed for the murder of James Young, September 8th, 1854.

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Equity and humanity have just grounds for complaint, that science is not more frequently appealed to, in criminal investigations. The Court of Inquest, often of questionable intelligence, selects, from policemen and by-standers, a jury to decide upon the most grave questions involved in medical jurisprudence. The opinion of non-experts is sought, to elucidate whatever occult points may arise in the investigation; but the man of letters is seldom called upon. Fortune, lives, and reputation are often thus sacrificed through ignorance, while science could readily have supplied the only absent link in the chain, coupling the deed with the offender.

The following *analysis* confirmed the *circumstantial evidence*, upon which Francis Dick was convicted of the murder of James Young. It was given in evidence by the State, that on the morning of August 13th, 1853, James Young was murdered, by repeated blows inflicted upon his head, with some heavy, blunt weapon; that Francis Dick had made threats of violence upon the deceased; that he had been seen coming from the direction of the body about the time the murder was committed; that stains, supposed to have been produced by blood, were found upon his apparel; and so much of a confession as led to the discovery of a spade, upon which were spots resembling blood.

The garment placed in my possession by the counsel for the State, to determine the character of certain stains, was woollen, of coarse fabric and

blue color. At various points, distributed irregularly over the skirt of the coat, were soiled spots of a dirty, brown color; appearing as though they might have been produced by grease.

These discolored sections were removed from the coat, and successively macerated in water. At the end of three hours, minute, dark brown currents were seen threading their way from the cloth and collecting in the bottom of the vessel. Several ounces of a dark red solution were thus obtained, portions of which were submitted to the action of the following agents:—

First. A small quantity was boiled in a test-tube. By this process, the fluid was rendered turbid, and changed to a drab color. Upon cooling, a muddy, brown precipitate formed, leaving the supernatant liquid colorless.

Second. Nitric acid, on being added to a portion of this solution, destroyed its red color, coagulated the contained albumen, threw down a dark, muddy sediment, and left a light-colored fluid.

Third. Tannin, when added to the above-designated solution, precipitated the red coloring matter and albumen in the form of a light, fleecy sediment, leaving a straw-colored liquid.

Fourth. Upon adding corrosive sublimate to the suspected fluid, the red color was immediately destroyed, the albumen was coagulated, and a muddy precipitate soon followed; leaving the superimposed water clear.

Fifth. After the red color of the solution obtained from the coat had been destroyed by the action of nitric acid, the addition of sulphocyanide of potassium instantly restored a blood-red color.

Sixth. The color of the suspected liquid was not altered by the addition of small quantities of ammonia.

Seventh. The red color was not discharged by the filter, nor changed by vegetable blues.

Eighth. The solution began to decompose on being exposed to the atmosphere in twenty-four hours, evolving an odor of animal decomposition.

The spade was old and the blade highly polished from use. The evening after the murder, and before the instrument was discovered, a light shower of rain had fallen; the drops of which, by remaining in contact with the back of the spade, produced numerous rust-spots. Mingled with and surrounded by these, were other discolorations, differing somewhat in size and shape from the former, being larger and spattered. These latter, were a shade darker in color, and when viewed obliquely, presented a glistening appearance.

I took a fine sponge, boiled it in soap and water, and afterwards washed

it thoroughly in hot and cold water. Two sections were then moistened in water, and one was applied to a supposed blood-spot, and the other to a rust-spot. After three hours they were removed, and the fluid pressed from them in different vessels. In each, the color was dirty or brown. Both were filtered. The fluid which had been in contact with the supposed blood-spot, lost a part of its color in passing through the filter; that in contact with the rust-spot, passed through perfectly clear. I tested for albumen, but failed to detect its presence. At a temperature of 100° Fahrenheit, I reduced the fluid from one ounce each, to half a drachm. Then, upon adding corrosive sublimate to that obtained from the supposed blood-spot, it immediately became turbid. A light fleecy precipitate soon formed, leaving the water above, clear. Corrosive sublimate when applied to the rust-water, did not change it in the least.

From the results of the above analysis, I gave it as my opinion, that the stains upon the coat which I examined, had been produced by blood; and that the solubility of the red-colored substance upon the spade in distilled water, producing a solution which answered one of the tests for hæmatin and albumen, furnished presumptive evidence of the presence of blood.

It was alleged by the counsel for the defence, in the primary examination of this case, that the stains upon the coat and spade had been produced by the tomato. To determine the correctness of this assumption, I submitted it to the following tests. I experimented upon the red variety.

First. I sliced a tomato, and macerated it for six hours in water. At the end of this time, the fluid was slightly, if at all, changed in color. Filtering rendered it perfectly clear.

Second. I mashed another tomato, and expressed the juice through a strong linen cloth. This yielded a light red fluid.

Third. Filtering removed the red color of this solution—No. 2; and upon allowing it to remain quiet for a few hours, the coloring matter was also precipitated.

Fourth. This fluid, No. 2, yielded a strong acid reaction.

Fifth. Ammonia changed this fluid, No. 2, to a light yellow.

Sixth. When portions of the expressed juice of the tomato were submitted to the action of heat, nitric acid, corrosive sublimate, and tannic acid, the red coloring matter was precipitated with the contained albumen, and a clear fluid left superimposed.

Seventh. After the red color was destroyed in the fluid No. 2, by nitric acid, it was immediately reproduced by the addition of sulphocyanide of potassium.

Eighth. This fluid, No. 2, decomposed, emitting an odor of vegetable fermentation.

Experiments were also made upon the expressed juices of the currant,

cherry, and blackberry, and upon the infusion of madder, logwood, lac, etc.; and in all these, ammonia changed their color to claret or green.

In a medico-legal aspect, the tomato assumed in this case, a new and important relation. To my knowledge, no other analysis than that made by Dr. J. T. Plummer, of Richmond, Indiana, and designed simply to determine the character of the contained acid, had ever been furnished to the world. I first submitted it to maceration, and found that the red coloring matter was insoluble in distilled water. This fact alone, effectually precluded the possibility of deception between tomato and blood; especially if the suspected substance was in the form of a dry stain. After the red coloring matter had been obtained in suspension, by mashing the tomato, it strongly resembled the color of a solution of fresh-drawn blood. I boiled a portion of this fluid—expressed juice—in a test-tube, which changed the color to a light brown, and filled the tube with minute flocculi. These latter, soon formed a muddy precipitate, leaving the water above it perfectly clear. Nitric acid, corrosive sublimate, and tannin, produced similar results.

The presence of albumen in combination with the coloring matter, demonstrated by the results of these last experiments, greatly impairs the value of heat, acids, and corrosive salts, as tests for blood alone.

When the red color of the tomato was destroyed by nitric acid, a red color was restored by the addition of sulphocyanide of potassium. Iron was found to exist only in the parenchyma of the fruit. The presence of this latter constituent, furnished another parallel in elementary composition, between human blood and the tomato. But the prompt action of ammonia in changing the color of the tomato, the insolubility of its red coloring principle in water, and being uniformly separated by the filter, are differences at once apparent to the man of science.

From the above analysis, I was satisfied that the stains upon the coat had not been produced by the tomato. It was equally apparent, that it had no agency in developing the discolorations upon the spade. Citric acid is the acidifying principle of the tomato. When this acid comes in contact with iron or steel, citrate of iron is formed. This salt is soluble in water, producing a rich yellow color. The dirty or brown color of the solutions obtained from the spade, depended upon the presence of foreign substances, chiefly insoluble in water—that from the supposed blood-spots only retaining any part of its original color after being filtered. This I attributed to the existence of hæmatin: 1st, from its solubility in distilled water; 2d, retaining its color after being filtered; and 3d, being destroyed and precipitated with the albumen by corrosive sublimate.

There is no direct chemical test, by which the presence of blood can be determined. The compound nature of this fluid requires that its character-

istic elements must be established by distinct reagents. Some of these are equivocal, others are infallible; some are simple, and admit of easy application, others are complex, and require delicate manipulation; some are positive, others are negative; but when all these combined agencies produce their legitimate results, they demonstrate the existence of blood beyond peradventure. Nature, the great master chemist, has not furnished in his vast laboratory any counterfeit for that inimitable animal fluid—the blood. It is unique and unrivalled in its composition. The philosopher may furnish a compound that will deceive human senses, but it will not bear the scrutiny of science.

Medical jurisprudence, thus far, has failed to furnish that concise and comprehensive detail of facts, touching criminal investigations, which the important nature of the subject demands. Those who, from necessity or otherwise, are compelled to perform such labors, find this field comparatively uncultivated. Obstacles of the most perplexing character present themselves at every advancing step; which, to those possessed of the usual facilities for investigation, are often insurmountable. This, added to ingratitude, want of consideration on the part of legal tribunals, and insufficient remuneration, render medico-legal investigations uninviting themes.

It is impossible, from simple inspection, to determine the existence of blood after a few hours. The changes which it undergoes will be greatly influenced by quantity, temperature, and substances with which it comes in contact. If a few drops of blood fall upon linen or other light-colored fabric, in a few moments the fluid portions will be removed by evaporation, leaving a bright, red colored stain; and when viewed obliquely, will present a glistening appearance. In from one to six days, this stain will assume a dark, brown color, and remain in this condition for an indefinite number of years, without undergoing any further change. This will take place much earlier, and the color be more decided—being quite black in some cases, if the blood has fallen upon wood, plaster, or other solid substance. After blood-stains have once undergone this alteration in color, there is no possible means of ascertaining from them, even by an approximation, their age.

When blood comes in contact with red or dark colored substances, the questionable value attached to color as a test will be wanting. The change produced depends much upon the shade of the article receiving it. In all cases, when the fibres of the cloth have been saturated with blood, the texture will be stiffened upon drying.

The above appearances and changes are those which blood presents and undergoes when uninfluenced by the presence of foreign substances mingled with it. They, however, may be varied infinitely, by circumstances incident to the occasion producing the stains, and which must influence the mind of

the medical jurist accordingly. The alteration which blood undergoes, and the great variety of means by which it is capable of being influenced after it passes from the body, are but mere instances, which render that class of testimony, based upon color alone, the most equivocal and devoid of confidence in criminal investigations.

There are two classes of red discolorations which are liable to be confounded with blood-stains, viz. those that are soluble in water, and those that are not. To the latter, belong red dyes and paints, iron moulds, etc. There is but one circumstance which is calculated to mislead the chemist, even temporarily. Blood-stains may be rendered insoluble in water by heat, of a temperature sufficiently high to coagulate the albumen. In this case, they are dissolved in boiling caustic potash, producing a green-colored solution. Tomato belongs to the insoluble class of substances. Its distinguishing characteristics have been referred to in another place.

Among the soluble stains that are liable to be mistaken for blood, those produced by the red fruits, such as the currant, cherry, blackberry, mulberry, etc., are the most common. The petals of certain flowers, and solutions of logwood, Brazil wood, madder, lac, etc., are also capable of producing discolorations that are deceptive in appearance.

The red color of no one of the above substances, when in solution, is affected by heat. They, however, are all changed to a crimson or olive green by ammonia. These simple tests are of themselves conclusive, and entitled to the utmost confidence. It is barely possible, that mordants or chemical agents may be so combined with these solutions as to prevent or counteract the operation of ammonia upon their red coloring principle. There are, however, so many chances against this, that it scarcely amounts to a possibility. M. Raspail says, that having for some years past performed numerous experiments, by mixing animal albumen or human serum with the red coloring matter of cochineal, madder, and lac, and neutralizing the effect of the alkali contained in the serum by acetic acid, I feel justified in stating, that in no respect whatever, except in regard to color, can such mixtures be confounded with blood. These red-colored liquids may deceive those who depend upon color alone; and herein is the absolute necessity of placing the investigations of such subjects in the hands of professional persons alone.

In making an analysis of any suspected stain, the first process consists in dissolving it in distilled water. So important are the evidences to be drawn from the peculiar manner in which blood unites with water, that were a suspected fluid furnished me for analysis, I would moisten a piece of clean linen in it, and allow the same to dry, in order to determine the action of water upon it, in forming a solution. If the stain be upon a manufactured fabric, sections of it must be removed and suspended in a test

tube, containing pure water. From one to three hours—the length of time depending upon the age of the stain and the texture of the cloth—minute tortuous currents, of a dark red color, will be seen threading their way from the discolored cloth, and collecting in the bottom of the tube. If the fluid is permitted to remain quiet, the blood will be entirely dissolved and transferred to the bottom, without perceptibly reddening any portion of the water through which it has passed. This process may be repeated until the requisite amount for analytical purposes has been obtained. The clear portions may then be decanted or drawn off by the syphon.

When any considerable amount of dirt or other soluble colored substance is present in the fabric containing the blood, the fluid in the upper portion and adjacent to the cloth, will be darkened or rendered turbid, leaving an intermediate clear stratum of water between this discoloration and the blood below. Unless in large quantities, the above impurities will collect upon the fibres of the cloth, or slowly fall to the bottom, marring the whole column of fluid through which they pass. Not so, however, with blood; when dissolved in virtue of its specific gravity, it is rapidly precipitated in beautiful spiral currents, peculiar to this fluid alone.

Blood-stains upon weapons, furniture, and other solid materials, are subject to all the changes in color that have been detailed in connection with articles of clothing. There is this difference, the globules and red coloring matter of the blood, are retained upon the surface, giving a darker tinge to the discoloration from the beginning; while upon cloth, they permeate the texture, and assume a dark color, only after the lapse of considerable time.

When a stream of blood is projected against a wall finished with white paint or plaster, the more gross portions will run off, leaving an irregular, nodulated stain of a light arterial color, which will not materially darken as long as the coloring substance upon which it falls, remains white. The lower end, or some portion of the stain, will usually be terminated by a drop or few globules of blood, which will be sufficient to produce a dark brown nodule upon drying, and will be perceptibly elevated above the surrounding surface. These appearances are peculiar to blood.

A sponge moistened in water, is the most convenient means by which blood-stains upon weapons, floor, wall, or furniture, can be transferred to the test-tube for analysis. One of fine texture is preferable. After having thoroughly cleansed it from all impurities soluble in water, a thin section of sufficient dimensions to cover the stain, must be saturated in water and applied to the suspected blood-spot. In order to expedite the dissolving process, slight pressure may be applied, which will force the water into the margins of the sponge, and bring it more perfectly in contact with the stain. The sponge should be thin as possible, or it will contain more water

within its meshes than is desirable, or will be colored by a small amount of blood. In from one to four hours—the length of time depending upon the age of the discoloration—upon removing the sponge, the lower surface will be found of a dark red color, the latter depending upon the coloring matter which it has taken up from the weapon or other article bearing the stain. The contained water when pressed from the sponge, will be of a light or dark red color, if the discoloration depended upon the existence of blood.

Blood dissolved in water undergoes changes as remarkable and as important to be observed, as when it falls upon apparel or articles of furniture. If the weather be hot, or the solution is exposed to a temperature below 160° Fahrenheit, the albumen and blood globules will rapidly undergo decomposition, evolving an odor peculiar to this process. With this decay of the animal ingredients of the blood, the intensity of the color will decrease, *pari passu*. This diminution of color is first perceptible in the upper strata of the fluid, and as it progresses downwards, the lower portions become more consistent and darker. As decomposition advances, the color of the fluid will assume a greenish hue, and at length wholly disappear; at which time a dark, slimy sediment will be found plastered over the bottom of the vessel containing the fluid.

The length of time that will be required to complete the above process depends mainly upon the temperature to which the solution is exposed, varying from ten days to two months. As long as the solution retains any of its coloring matter, albumen and iron may be detected by their appropriate tests. But the results of these reagents will be less striking as the color disappears, until it is entirely gone, when they cease to produce any perceptible results on being added to the decanted fluid.

The precipitate formed by the decomposition of blood, is a dirty, brown, slimy mass, miscible, but not soluble in water. When briskly agitated with this latter fluid in a test-tube, the precipitate breaks into small, detached fragments, which speedily fall to the bottom as the fluid becomes quiet. This precipitate abounds in iron, and may be detected by the sulphocyanide of potassium, after converting the former into a free salt.

It is of the utmost importance to know the variable results which will flow from the action of the same reagents, when applied to blood in different states of dilution. Most of the reliable tests for blood utterly fail to produce the results attributed to them by authors upon medical jurisprudence, when applied to it in an undiluted state. And this remark is equally true of others, when added to blood diluted by many times its volume of water. Nitric acid dropped upon fresh-drawn blood, will convert it into a black, semi-solid mass. Heat will also change it to a soft solid, of a dark brown color. Corrosive sublimate and tannin, when added to blood diluted

with ten or fifteen times its volume of water, will render the whole of a light brown color, and double its former consistence. Tests applied to blood in the above condition, for iron, will fail.

It is seldom that the analytic chemist will be troubled with these difficulties; yet they are not beyond the range of possibility. The legitimate effects of the usual chemical reagents are not uniform until blood is diluted with several hundred times its volume of water. One drop of blood will impart perceptible color to forty ounces of water. At any point between these extremes, the constituent elements of blood can be determined with great certainty. The affinity which exists between certain agents and albumen is so great that the presence of the latter can be rendered perceptible to the naked eye in a solution of blood, long after all traces of color have disappeared by dilution. This is true, so far as I know, only of corrosive sublimate and tannin.

In making an analysis to determine the existence of blood, we seek to demonstrate the presence of *hæmatin*, *albumen*, and *iron*. Fibrin is so nearly allied in composition to coagulated albumen and gluten, that it is difficult to establish the difference between them by chemical reagents. The salines, oils, and extractive matters of the blood, are found profusely distributed throughout nature, and are therefore unimportant.

Hæmatin is peculiar to the coloring matter of blood, and when its presence is susceptible of clear demonstration, it is unequivocal, and of more importance as evidence of the existence of blood than all the other constituents combined. Water is its appropriate menstruum, uniting with it more readily than any other known fluid. Albumen is one of the chief constituents of blood, and exercises an important influence in the analysis. Though abounding in many vegetable and animal substances combined with red coloring matter, iron, when associated with hæmatosin, furnishes additional evidence of the existence of blood. It is one of the most indestructible elements of this fluid, and some physiologists refer the red coloring entirely to the presence of the peroxide of iron. But this latter may be removed from the blood by strong chemical agents, that unite readily with it, leaving a dark red or brown principle, to which the name of *hæmatin* has been given.

The test for this substance, *hæmatin*, is negative, and of the most unequivocal character. When ammonia, in small quantities, is added to a solution of blood, the color is not changed; but if the former is concentrated or combined in large amounts, the color will be darkened. The great value of this negative result, is based upon the principle, that all known red coloring substances which are soluble in water, are changed to crimson, green, or yellow, by the action of the above-named alkali.

Heat is one of the usual tests for blood. The promptness with which

a solution of the latter is changed by boiling, is wholly due to the inherent power possessed by the former, of coagulating albumen. The red coloring principles of blood, hæmatin and iron, are not destroyed by heat, as alleged by some authors upon medical jurisprudence. They are only entangled in the meshes of albumen, as it is coagulated, and precipitated. A want of knowledge of these facts, has occasionally misled. I once saw, during the course of a criminal investigation, a medical witness exhibit a vial of blood, which had been boiled three times, without destroying the red coloring matter. He did not pretend to account for the fact, but furnished it to disprove the reliability of heat, as a test for blood.

When the albumen has been dissolved out of a coagulum, or is absent from a solution of blood from any other cause, and the red coloring matter is mingled with water, no amount of boiling will destroy the red color. So it may be of blood-stains, which have been submitted to maceration more than once. The first process dissolves out the albumen, salines, and some of the red coloring matter. The subsequent ones, will take up an additional amount of the coloring principle, but the solution will not contain enough albumen to precipitate the coloring matter.

Nitric acid, when added to a dilute solution of blood, immediately changes its color to a dirty brown. After a few moments, a dirty precipitate forms—the amount depending upon the quantity of albumen and impurities that may have been suspended in the solution—leaving a colorless liquid superimposed.

Corrosive sublimate and tannin are by far the most delicate and reliable tests for albumen. They produce their most signal results, when blood is largely diluted with water. Either of them will disclose to the unassisted eye, the presence of albumen contained in a drop of blood, so much diluted that color is no longer perceptible.

When a solution of the former is added to blood diluted with water, the whole assumes a dark, drab color. The albumen thus coagulated, with the red coloring matter of the blood, will be precipitated in the form of a dirty, impalpable sediment. The supernatant liquid will be colorless. In proportion as the solution of blood is diluted and free from foreign matter, so will the quantity and color of the sediment decrease. If diluted beyond the coloring point, and corrosive sublimate be added in substance, the results will be different. As the crystals dissolve, minute tufts or fibrillæ of coagulated albumen, will be seen leaving their surface, mounted by one or more minute globules of gas; which rise to the top of the water. This process continues, until all the albumen contained in the tube, is coagulated; and instead of being precipitated, collects upon the surface of the water, and presents a white color.

Tannin, on being added to a solution of blood, at first lightens the color.

In a few moments, upon viewing the solution by a transmitted light, it will be found that the whole fluid is occupied by minute flocculi, floating in colorless water. These flocculi, from their fleecy character and specific gravity, do not appear capable of packing very closely, and unless the solution was much diluted, they will occupy the entire space of the original liquid. If this be not the case, the flocculi will separate into two masses, one floating upon the top and the other falling to the bottom, leaving an intermediate column of clear water. The flocculi are of a light red color; and when the tube containing them is briskly agitated, they appear to dissolve; rendering the fluid of a delicate pink color. As the fluid becomes quiet, it separates into its original constituents.

If tannin is added to blood diluted beyond the point when color ceases to be perceptible, a green appearance is first imparted to the fluid. Soon, the whole mass becomes agitated, resembling water immediately preceding ebullition, motion in the ascending and descending currents being quite rapid. Minute sprangling masses and fibrillæ soon form, and settle upon the bottom, or most depending side of the tube if it stands obliquely.

Sulphocyanide of potassium is the most delicate test known, for any of the persalts of iron. When in solution, their union produces a bright arterial color. Iron, as contained in fresh-drawn blood, requires additional oxygen before the sulphocyanide will take cognizance of its presence. Nitric acid is eminently fitted for this purpose; as it destroys the red color of the blood, while it is converting the iron into a pernitrate. When this is done, by adding a solution of sulphocyanide of potassium, a bright red color will be reproduced. In this experiment, great care should be taken to free the agents used from iron; as the slightest trace present will destroy the value of the test, or deceive the manipulator. There is another source of fallacy. It is this. When a large amount of albumen is contained in the solution, nitric acid, when added, will, on coagulating it, lock up the iron within its meshes, leaving nothing to be acted upon by the cyanide. The iron may, in this case, be liberated, by boiling caustic potash, which must also be free from iron.

There are many other chemical reagents, by which the elements of blood can be recognized; but the above are the most simple and reliable, and sufficiently comprehensive for all practical purposes. When the quantity of blood is very minute and fresh, the microscope will furnish evidence of great value; but in the hands of an inexperienced microscopist, it is a dangerous instrument.

A deep solicitude was naturally felt by every citizen of the community in which he had lived, and especially those who, directly or otherwise, had in any manner been connected either with his conviction or execution, to know the precise circumstances under which Francis Dick killed James

Young and his mother,* and the means by which the deed was accomplished. A few moments before he stepped upon the scaffold, his priestly adviser—a gentleman who had Dick's utmost confidence—by special request, asked him concerning the instrument used in committing the murders. To which he replied, that it was "the spade, and only the spade—the one that appeared against him in court."

On the Pathology and Treatment of Acute Rheumatism. By O. C. GIBBS, M. D., Perry, Ohio.

In the February number of the "Medical Examiner" for 1854, I published a few thoughts upon the treatment of acute rheumatism. The appearance, in this country, of Dr. Fuller's full and able work upon rheumatism, and some of the opinions therein maintained, and, so far as I have observed, critically approved by medical periodical journalists, have induced me again to introduce the subject for additional remark.

A disease so frequently met with, in all latitudes and in every condition of life, often protracting itself for many weeks, and, if not directly fatal in its incipient form, both directly and indirectly so in its cardiac and many other complications, certainly needs no apology when frequently introduced and made the subject of therapeutic comment.

Much has been said by able writers upon the pathology of this affection; but, up to the present time, little is known beyond the vagaries of conjecture. This diversity of pathological opinion has been more than equalled by contrariety of therapeutics; for in but few diseases has there been a greater discrepancy in the modes of treatment proposed and adopted by the most intelligent authors and observing practitioners.

A notice of a few of the more prominent pathological and therapeutic opinions may not be uninteresting in this connection. Dr. James Arthur Wilson, in a lengthy paper, published in the February number of the "London Lancet" for 1845, expresses his belief that rheumatism is essentially an idiopathic fever, and that the determination of inflammation to the joints, etc., is as much a conservative process as is the eruption in rubeola.

A few quotations will give a more faithful expression of his opinions. Thus, he says, "The disorder known as acute rheumatism is, in truth, a well-marked idiopathic fever, always tending, like other fevers of this kind, to limit itself by its own actions within a given period of time." * * * "As the scarlet fever localizes itself especially in the throat, the measles in

* In his confession he acknowledged that, in addition to the above two, he had also killed Mrs. Young's husband, three years previous.

the mucous lining membrane of the lungs, the epidemic typhus in the cæcum and lower ilium, and the erysipelas fever in the integuments of the head and face, so is the rheumatic fever determined, by special effects of inflammation, to the larger joints of the body and the surrounding articular structures. But the heat, redness, and swelling thus induced, are no more the cause of the constitutional disturbance in acute rheumatism, than the scarlet rash or the small-pox pustule of the fevers that bear their respective names." * * * * "It most resembles the exanthematous fevers; for, like them, it is distinguished by a series of rapid, continuous actions, violent as inflammation, yet harmless, for the most part, in their results. Of this eruptive character there is abundant illustration in the heat of surface, the profuse acid sweats, the erythema, and varied miliary rash, by which the rheumatic fever is specially distinguished. Its action is not more determined to the joints than to the skin." * * * * "The local rheumatic inflammation, like that of small-pox pustule, is exactly limited in space and time, and is protective of the part it occupies. Salutary in its purpose, it is succeeded by an action of repair, measured, rapid, and peculiar in itself." * * * * "The joint-fever of acute rheumatism is likewise a heart-fever." In reference to treatment, he says, "Yet, in the approved treatment of rheumatic fever, though the character of its action be special and inflammatory, the principle of its cure is not antiphlogistic." * * * * "In the treatment of a disorder which is essentially one of action, the best indications are those which its own action affords; and thus, in the lavish sweats of rheumatic fever, we find our warrant for the use of remedies which are determined specially to the skin." * * * * "In absolute power over the fever of acute rheumatism, by the direct control of every symptom, the hot-air bath is superior to all remedial means hitherto employed."

In reference to the pathology, it is necessary to say only, that if the disease is essentially one of fever, and the arthritic complication is conservative, or, to use the author's language, "is protective in tendency and purpose, as furthering the great business of excretion," then the fever should in all cases *precede* the local inflammation; the most *favorable* cases should be those accompanied with the *greatest* amount of protective local disease; the worst cases, should be those in which the local conservative process, as in measles, does not "come fairly out," and the cardiac localization should be alike salutary. Unfortunately for this theory, for this attempt to class rheumatism with the eruptive fevers, known facts militate against it. The local inflammation almost always *precedes* the fever, which, in intensity, bears a striking resemblance to the amount of local disease. In a word, the severer the arthritic complication, which is called "protective in tendency and salutary in purpose," the severer, usually, is the fever, and the less

amenable to treatment. This fact alone is sufficient to gainsay the theory.

The plan of treatment by diaphoretics is by no means new, having for many years had occasional advocates. To the writer, the treatment seems about as consistent in rheumatism, as the same sweating plan which was for a long time practised in small-pox. If the diaphoresis peculiar to rheumatism, is an indication for the exclusive employment of diaphoretic remedies in the treatment of that disease, then the same remedies should be employed, and should be superlatively efficacious, in the treatment of hectic; for the same indications are an equally *legitimate deduction* from the profuse nocturnal perspiration in that affection. It is very generally conceded, that the sweats peculiar to rheumatism by no means mitigate the local disease, or, appreciably so, the general symptoms; if this be so, it is certainly difficult to see how perspiration, artificially produced, should be more efficacious in a remedial point of view. I know, Dr. Wilson, and Dr. Fuller as well, attempt to refute this general opinion; but, at present, the weight of argument is against them.

Dr. Wilson's opinions have been noticed thus fully, because his therapeutic indications are the same as are deducible from the pathological opinions of most other writers upon this disease. Very many consider a deficiency in the cutaneous excretions to be the exciting cause, and the consequent retention and accumulation of morbid material in the blood, as the principal pathological element in this affection. If this be so, then the hot-air bath and diaphoretics of Dr. Wilson should be the only needed, and the most efficacious of all known remedies. The opinion first expressed by Dr. Prout, and advocated in the late work of Dr. Fuller, forms no exception to this; for, if lactic acid be the "*materies morbi*" in acute rheumatism, then the profuse acid-sweats point to the above-mentioned remedial agents as the sheet-anchor in this disease. But more upon this further on.

In the London Medico-Chirurgical Transactions for 1849, there is a paper from the pen of W. Basham, M. D., on the Pathology and Treatment of Acute Rheumatism. From several analyses of the blood taken from patients laboring under this disease, he finds the fibrine increased to more than double its normal amount; while the salts are deficient, by rather more than one-fifth of their weight in health. This increase of fibrine, accompanied with a deficiency of the saline ingredients in the blood, he looks upon as a therapeutic indication for the exclusive use of the nitrate of potash in the treatment of rheumatic affections. Admitting Dr. Basham's analyses to be correct, and the pathological conditions of the blood, which he discovers, universal in acute rheumatism; these conditions can not be dignified with the title of *chief causes*, or principal pathological elements of that affection; being simply *ordinary phenomena* of the disease.

An excess of fibrine is common to all inflammatory diseases, and a deficiency of saline ingredients in the blood is certainly not peculiar to rheumatic affections. (See William's Pathology, third American edition, p. 107 and 109.) This treatment by nitrate of potassa is by no means new. Dr. Brocklesby was among the first who proposed it, and it has since been largely used and recommended by Drs. Gendren, Solon, Bennet, and others.

The grounds upon which Dr. Basham recommends the nitrate of potash are worthy of a moment's notice. He claims *first*, that it remedies the deficiency of the saline ingredients in the blood, and *second*, that it diminishes the amount of fibrine, and prevents its deposition, by destroying its property of coagulating. I cannot conceive, and he does not explain, how the first can be accomplished by the introduction of a salt which is not a constituent of that fluid in its healthy state. (See Simon's Chemistry, Vol. 1st, p. 232.) Dr. Karl Popp infers, that the administration of nitre diminishes the amount of fibrine in the blood (See Ranking's Abstract, June, 1846); but that inference, I believe, is still wanting in proof. Dr. Blake, of St. Louis, has proven positively that it *does not* prevent the coagulation of the blood; but, on the contrary, when injected into the veins, coagulated it firmly. Of whatever therapeutic value the nitrate of potash may be found possessed, in acute rheumatism, Dr. Basham's theory of its action seems certainly untenable. That it exerts a remedial influence over the disease I am not disposed to deny; but that it is in any way superior to the *same influence* over *other diseases* of an inflammatory character, I have never seen reasons for admitting.

Persevering has been the effort to find the proximate cause of acute rheumatism. Dr. Fuller, in his late work, says upon this point, "It is probable, therefore, as the skin is the peculiar emunctory of lactic acid, that in it we have discovered the actual *materies morbi*." He believes the immediate agent, in developing the phenomena of rheumatism, to be "a morbid matter in the blood, generated in the system as the product of a peculiar form of mal-assimilation—of vicious metamorphic action. This poison it is which excites the fever and produces all the pains and local inflammations which are often found associated in an attack of rheumatism." Dr. Prout was perhaps the first who suggested this view of its pathology, since which it has not lacked for advocates both at home and abroad. Still, the opinion is as hypothetical as when first suggested. Though the favorite offspring of many a foster-parent, it has not yet the power to stand alone. With this view of the nature and essential cause of the disease, Dr. Fuller believes this acid *materies morbi* may be neutralized, "its irritative property probably diminished, and its elimination promoted, by a free exhibition of alkalies and neutral salts." The alkaline plan of treatment was recommended by Dr. Buckler, of Baltimore, in the *American*

Journal of Medical Sciences, for 1842; by Drs. Edwards and Wright, in the *Medical Times*, for 1847; by Drs. Budd and Golding Bird, in the *London Lancet*, for 1851; and other physicians in this country and elsewhere, have administered and advocated the same remedies. Dr. Furnival, in the *London Lancet*, for 1844, recommends alkalies as almost specific in their action, not only in the arthritic inflammation of rheumatic disease, but in its cardiac complications also.

Lactic acid may be "the primary, proximate, or essential cause of the disease;" but wanting proof, as the opinion does, nothing would be lost, I apprehend, in considering the acid character of the cutaneous and renal excretions as one of the *ordinary phenomena* of this affection, rather than dignifying it with the title of essential character and proximate cause. That these excretions are symptomatic, instead of causative, gains support from the fact that they are by no means peculiar to inflammatory rheumatism. If lactic acid be the *materies morbi* of this affection, may not alkalies be given to such an extent as to effectually neutralize it, and thus cut short the local inflammations with the same speed and certainty with which quinine arrests, or rather prevents further paroxysms of the ague?

Alkaline remedies may be important curative agents in this affection, but I opine that it is not necessary that they act directly as antacids; at any rate, I question their specific action, as neutralizers of an acid *materies morbi*.

Until some new light shall be thrown upon the nature of acute rheumatism, I trust nothing will be lost to sound pathology, or a wise and safe therapeutics, in considering the disease one essentially of inflammation; of which the fever and acid sweats are but the ordinary phenomena and sequel, and in the production of which, cold is the chief exciting cause. I know, Dr. Fuller denies to cold any such agency; but, notwithstanding this denial, I opine the medical world will still consider cold the chief external cause of rheumatism, and the retention of normal excretions in the blood an ordinary phenomenon, or at most a secondary cause and sequence of the primary. If this opinion, in reference to the nature and cause of rheumatism, be correct, then it would seem that the ordinary antiphlogistic remedies conjoined with those of a kind calculated to act decidedly upon the excretory organs, favoring thus the elimination from the blood of retained normal excretions, would be those best calculated to subdue the disease. Blood-letting, purgatives, and mercurials, have long enjoyed the reputation of being second to no other remedies in the treatment of inflammatory diseases. And, if to the judicious use of these, diuretics, diaphoretics, and, in certain cases, tonics, be added, it would seem as though all the indications deducible from the nature of the difficulty and the symptoms, were being fulfilled. The treatment adopted by Dr. Chambers, and communicated by Dr. Hope, in its

minutiæ, seems so perfectly adapted to meet the indications in this disease, as to be worthy of especial mention. The plan is doubtless familiar to every reader, but its importance will justify a repetition. It consists in a full venesection in the robust (to be omitted in the feeble), to be followed by eight or ten grains of calomel and a grain and a half of opium, every night, succeeded every morning by a strong black dose, sufficient to secure four or five stools. With this treatment is combined, thrice a day, a saline draught, containing from fifteen to twenty minims of the wine of colchicum, and five grains of Dover's powder. The calomel to be omitted when the swelling and pain greatly abate, or the gums become in the least tender. For several years, I have adopted this plan of treatment, and when early commenced with have never seen endo- or peri-cardiac complication, or known a case to protract more than ten days. These fortunate results may have been accidental; but I have tried other plans,—have used the nitrate of potash as recommended by Dr. Basham, and the alkaline carbonates now so highly spoken of by Dr. Fuller, and the results have by no means been as favorable as those given in the statement above. I have used the alkalies for four weeks in a sub-acute case of rheumatism, without benefit, and then put an end to it in a week by the treatment detailed.

Dr. Fuller affirms that the use of mercurials in rheumatism, *invites* cardiac inflammation, and some of his reviewers subscribe to his statement. I am disposed to question the correctness of this statement. The period at which cardiac complications supervene, according to Dr. Budd, varies from the eighth to the twenty-seventh day. Now, in view of this fact, it would seem reasonable to suppose, that if the disease could be almost invariably put an end to *before* the eighth or tenth day, by judicious medication, that such medication would very *materially lessen* cardiac complications. Again, it is admitted that, when endo- or peri-cardiac inflammation supervenes, calomel is the sheet-anchor, and should be given to the extent of producing ptyalism, simultaneous with the production of which the local and general symptoms begin at once to amend. Now, if the existence of rheumatic carditis is incompatible with the mercurial impression, then it is certainly reasonable to suppose that the early induction of this impression, or any considerable approximation towards it, *before the supervention* of cardiac inflammation, would *diminish* rather than increase the frequency of such rheumatic complications.

It may be objected that the treatment proposed by Dr. Chambers, and here recommended, savors too much of empirical routinism. In reply, it may be said, it is not more routinal than is the treatment for most other diseases. In pneumonia, for instance, blood-letting, antimonials, mercurials, are the remedies; in comparison with which all others are inefficient and unsatisfactory. In regular practice, hardly a case occurs of the acute dis-

ease, but these remedies, in the whole or in part, are put in full requisition. A sameness of disease would seem to require a sameness of remedies, varied only to meet peculiarities of constitution and severity of attack. Remedies cannot be said to be empirical, unless given irrespective of the indications deducible from the symptoms or pathology of the affection. In inflammatory rheumatism, no known remedies seem better calculated to subdue the inflammation and fever than blood-letting, mercurials, and purgatives. And to excite the liver, bowels, kidneys, and skin, to assist in the process of elimination, mercurials, purgatives, colchicum, nitre, and opium, are the means most worthy of confidence. In asthenic cases, blood-letting is, of course, injudicious; and mercurials, and purgatives, should be administered less energetically, and conjointly with quinine or some other tonic. It is in such cases, I apprehend, that the beneficial effects of alkalies are most conspicuous; acting, perhaps, not as antacids, but similar to and as a mild substitute for mercurials.

In the study and practice of medicine, there is a constant longing for medicines new and more efficacious. In rheumatism, I apprehend the list is already too ample; that more, perhaps, may be gained by a judicious combination and use of those already known and long and successfully administered.

Proceedings of the New York Pathological Society.

Oct. 11th. Dr. *Clark* presented two specimens, said to have been voided from the bladders of two females. They were very complete filiform animals, five or six inches in length, of a dark brown color, having a flattened body, with a head without enlargement, and simply the abrupt termination of the body. The tail is bifurcated, presenting an opening like a serpent's mouth, which the animal has the power of opening and closing at will. One of the specimens was recent, and yet alive, having been kept in water that had been occasionally changed for a month past. The only difference between the specimens consists in their size, one being twice as large as the other, though of the same length. Dr. C. mentioned a third specimen of this character that had been sent to him, and which was said to have been coughed up. He considered water to be the natural element of these animals, and that they were accidentally present in the vessels into which the urine and sputa were discharged. The reasons against considering them to be entozoa were: first, that, he having seen three, no other observer had noticed them; second, their color, which he thought would not probably exist if they had been formed within the body and away from the influence of light; and third, that if made to live in urine, they could not exist in simple water for a month.

Dr. *Isaacs* said he had seen some animals discharged from the skin similar to these specimens, but black.

Dr. *Uhl* presented the stomach of a boy, who, in a scuffle, was wounded by a cheese knife, which entered between the cartilages of the seventh and eighth ribs, a little to the left of the median line. The boy lived but six hours. On the anterior wall of the stomach there were three wounds. There was a wound in the diaphragm, in which a portion of the stomach was strangulated. Blood was found in the cavity of the left pleura, but none in the abdomen.

Dr. *Uhl* presented the aorta of a man killed by a pistol ball. The ball entered between the fifth and sixth ribs on the right side, four inches below the armpit, passed through the aorta and lower lobe of left lung, and lodged in the integuments of the left back, between the sixth and seventh ribs. [A great portion of the deflection in the course of the ball was evidently produced by the force of the current of blood in the aorta carrying the ball downward.—Ed.]

Dr. *Markoe* thought that the established rules as to the comparative size of places of entrance and exit made in gunshot wounds, were incorrect. The case of a boy, now in hospital, was referred to, where one ball had passed through both knees without touching the bone, in which the first wound of entrance was by far the largest of the four. Much, however, depends on the tension of the parts, the character of the tissues, and their proximity to bone.

Dr. *Sewall* exhibited the stomach and heart of a man, aged 65, who had died very suddenly, almost while saying that he was improving in health, and directly after an agreeable conversation with a relative. The symptoms were only generally arrived at. For thirty years he had been an invalid, complaining principally of difficulty of breathing at times, which was referred, now to asthma, and again to disease of the heart. He had been affected with an irregular, capricious appetite, and many indefinite stomachic symptoms, referred in general to dyspepsia. For a year past this latter difficulty had increased upon him, accompanied with occasional vomiting, and frequent diarrhœa. He has, at intervals, vomited considerable blood. For a few weeks past he has been more than ever troubled with dyspnœa, which at times was so severe as to give the sensation of impending dissolution. The feet, hands, and scrotum have been highly anasarcous. Two days before his death he vomited a good deal of blood, and for the last month the diarrhœa has been very considerable. He also suffered from hæmorrhoids.

The postmortem examination was made thirty hours after death. The hands, feet, and scrotum were highly œdematous, and there was considerable effusion into the areolar tissue about the chest. The lungs were

healthy, and crepitated everywhere, except in the lower right lobe, which was congested. Frothy serum exuded from the incisions in the upper left lobe. There was about one half-gallon of clear serum in each pleural cavity, but no adhesions in either. The heart is of natural size, and overlaid with fat. Water poured into the aorta, makes its way slowly into the ventricle. The aorta and aortic valves are dotted with atheromatous deposit. The aortic valves are slightly thickened; the mitral valve is healthy. The muscular structure of the heart is flabby, and moderate pressure causes the finger readily to penetrate its substance. The right ventricle was engorged with blood, and its valves are healthy. The liver was firmly adherent to the diaphragm over its right lobe, natural in size, but rather paler than usual. The gall-bladder was empty. The spleen was healthy. The kidneys were natural in size and structure, but of a deep red color; and within the capsule of the left one there was a small abscess, containing four or five drops of thin, dark colored pus. The stomach is of natural size, and contains a small amount of thick, reddish mucus. About the middle of its greater curvature is a mass of soft, pultaceous matter, of a brick-dust dolor, as large as an egg, apparently adherent to the mucous coat, and projecting into its cavity. There is no abrasion or discoloration of the peritoneal surface at the point of attachment of this mass. Placed in water, it separates into a filamentous structure, having a ciliary motion in the fluid, and presenting an appearance like that of exaggerated cilia. The stomach, elsewhere, was healthy. The peritoneal cavity contained perhaps two quarts of clear serum. The omentum was studded with fatty masses, of various sizes, which floated in it. The brain was not examined. The tumor was referred for microscopic examination.

The cause of the sudden death being inquired into, Dr. Clark said there was nothing, in his opinion, revealed by the postmortem examination to account for it, but suggested that it might have occurred from apoplexy. He had cognizance of six cases wherein death had occurred instantaneously as a consequence of a sudden effusion of blood around the medulla oblongata, interrupting the functions of the respiratory nerves. [Is not the condition of the heart itself sufficient to account for the suddenness of the death, without going beyond the postmortem appearances, and that whether it be considered a case of weakened or of fatty heart?—ED.]

Dr. Post exhibited a bone from the external meatus of the ear of a young lady, aged fifteen years. She was first seen by Dr. P. four months ago, and was then complaining of intense pain about the ear, which had existed for many months previously. Deep suppuration about the mastoid process was suspected, over which, and through the periosteum, an incision was made, from which pus freely escaped. Necrosed bone was supposed to exist at the bottom of the wound, and caustic potash was applied to keep it

open. The swelling, which had been very great, subsided posteriorly, but increased anteriorly, after the incision. Three weeks ago, being again consulted, the anterior swelling was found greatly enlarged, and a fungus tumor, prominent and very painful, protruding from the old wound. Ether having been given, a free incision was made through the tragus into the external meatus, when two portions of loose bone were found, and the finger could be passed an inch into the meatus. The patient is now doing very well, and will probably be restored to health, though hearing on that side is lost. The facial nerve of that side was paralyzed.

Dr. Dalton exhibited a dog whose spleen he removed eight days ago. The animal is now in good spirits, and eats well. The attention of the Society was called to the appearance of the eyes caused by a white color of the iris.

Dr. Batchelder suggested that this was common in horses, and they were called wall-eyed on account of it.

Oct. 25. *Dr. Clark* exhibited five specimens. The first—the heart and aorta of a woman 73 years old, an inmate of a charitable institution on account of her age and infirmity, who was not known to have any disease till the time of her death. She had complained only of a little pain low down in her side. While engaged in some light work, she suddenly died. A large aneurism of the aorta was found, involving the entire arch, which had burst into the left pleura. The heart was healthy.

The second specimen was a liver and kidney taken from a man who died of pneumonia occurring upon the cachexia of miasmatic fever. He had for a long time been pallid, and was much emaciated. The legs were swollen, and dotted with a bright purpura on his entrance to the hospital. For a week he was treated with tonics and nutritious diet, when the physical signs of pneumonia were observed; and for eight or ten days he went on hopelessly. Hæmorrhage from the mouth and tongue then occurred, succeeded by epistaxis and discharges from the bowels, and he sank from exhaustion. The colon was half full of dark matter, blood mixed with fœces; nothing remarkable was found in the lungs. The liver was in a state of fatty degeneration, the left lobe being marbled with light grey spots, presenting that form where the disease commences in some lobules, and then extends to those in the vicinity, leaving some parts untouched. The kidney was a little larger than usual, and contained a moderate amount of fat. Some of its cells were granular, and some filled with fat, inducing the belief that Bright's disease was commencing, though the urine, which was once examined, contained no albumen.

The third specimen was one of apoplexy, occurring in a man sixty years old. He was admitted to the hospital while insensible, and died two days afterward, his history not having been obtained. A large effusion into the sub-

stance of the brain was found in the upper and anterior portion of the left hemisphere, and a smaller one in the middle and upper portion of the right lobe. The point of interest in the case was, that while the lesser effusion was in the right hemisphere of the brain, the greatest paralysis was on the left side of the body.

The fourth specimen was a small portion of the superior articulating surface of a tibia. The patient was admitted to the hospital six weeks before the rheumatism, of which he had been complaining for five or six weeks. On the second day of October, it had subsided at every part except the right knee. There the swelling and redness continued, and fluctuation was discovered, the result of a secondary synovitis. Before death, the cause of which was not determined, the swelling subsided, and motion was partly restored. The opposite surfaces of the synovial membrane were found to be everywhere adherent. The membrane was reddened, and about a half-teaspoonful of blood was found. The femur was healthy. A ring of ulceration extended half round the left anterior articulating surface of the tibia. The marks of a former chancre on the penis suggested a syphilitic origin. The mesenteric glands were all more or less enlarged, of a yellowish white color, and had all undergone a peculiar change. A specimen was presented some time ago, where the glands had undergone a species of degeneration akin to that of the waxy liver, and it was thought this might be of the same character. Close examination revealed a very different condition of things. The tubes were found mostly denuded of epithelium, and loaded with fat, which was readily discharged from them. They were overlaid to an extraordinary degree with a fibrous tissue thicker than that naturally belonging to them. None were healthy. In the midst of the glandular tissue oil was abundant. As in the kidney and the liver, this fatty degeneration was associated with a low grade of inflammatory action, producing an excess of the fibrous element of the part.

The fifth specimen was one half of a kidney, having to the eye a healthy appearance. To the touch, however, it was hard and unyielding, and its tissue was uniform. It was taken from a man thirty-three years old, who was admitted to the hospital October 20th, his wife and child having just died of cholera, and being supposed to have the same disease. He was a stout, athletic, well-developed person, and was reported to have been well till four days before. When admitted, he had diarrhœa, three or four stools daily, and vomited occasionally. His legs and hands were very cold. He was weak and drowsy, and it was difficult to fix his attention, he answering questions only in monosyllables. His face was neither flushed nor pale. The pupils were dilated, and unaffected by light. There was no cramp or convulsion. The pulse was 60, and feeble; the capillary circulation everywhere slow. Twenty-four hours after admission, having passed

no urine, a catheter was introduced, but no urine was found. Twelve hours later, half a pint was drawn off, which was highly albuminous. The second day after admission, he expectorated continually, and was unable to answer questions. He gradually grew more and more comatose, keeping his eyes wide open, and giving no evidence of any sensation for five hours before death. He died thirty-eight hours after admission, his disease being supposed to be arachnitis. The brain was found to be entirely free from inflammatory effusion, but there was a little venous congestion. The convolutions were flattened, as was supposed, from internal pressure. There was no fluid in the ventricles. On subjecting the kidneys to microscopical examination, three-fourths of the tubes were found to be denuded of epithelium, which was replaced by fat. Not one tube in twelve was healthy. The case was one of uræmia, which so closely imitates arachnitis as to present great difficulties in diagnosis in the early stages of the disease.

A discussion followed upon the impropriety of trusting to the unaided eye alone in postmortem examinations; grave mistakes being alleged to result from this course.

Dr. Metcalfe exhibited five specimens, the first being a portion of the brain of a man of intemperate habits, who died of chronic arachnitis. On the anterior portion of the external lateral surface of the left hemisphere, is a patch of calcification three-fourths of an inch long, three-eighths of an inch wide, and of decided thickness, imbedded in the substance of the brain beneath the arachnoid.

Dr. *Peaslee* asked if true bone was ever developed by any thing else than periosteum, except in those bony organizations found in the uterus and ovaries. The opinion of the members so far as expressed was that it is not. [Mr. Paget's opinion is that it is, and that both in the osteoid and in the osseous growth lacunæ and canalicules may be seen.—Ed.]

The second was a specimen of aneurism of the aorta bursting into the circular fibres of the œsophagus, dissecting between the layers of these fibres, and opening through the gastric peritoneum into the abdominal cavity. It was from a man forty years old, who entered the hospital the middle of September. He died a few minutes after reaching his bed. Nothing could be learned of his history. Forty-eight ounces of blood were found in the abdomen, which came through a rent of the size of a quarter of a dollar in the upper and anterior part of the gastric peritoneum, three inches to the right of the cardiac orifice of the stomach. The opening from the sac was not more than one inch in diameter, situate in its posterior wall opposite the origin of the left subclavian artery. The aorta was thickly studded with patches of atheroma. The heart was of normal size and degenerated by fatty growth.

The third specimen exhibited, for Dr. G. Weber, was a stomach and

liver, with a duodenum filled with gall-stones preventing the exit of chyme from the stomach, and causing death by inanition. The specimen was taken from a man fifty-four years old.

The fourth specimen was a larynx exhibiting the condition of that organ in phthisical laryngitis. There was a slight ulcer just below the ventricles.

The fifth specimen, exhibited for Dr. Finnell, was a spleen weighing a little over six pounds, taken from a man thirty-one years old, who had never had any form of miasmatic disease. He had suffered from epistaxis and abdominal dropsy, unconnected with disease of the liver or kidney.

Dr. Elliott presented a specimen of aneurism of the thoracic aorta, from a man forty years old, who entered the hospital September 3d. He then complained of cough, which had existed for only three weeks, with difficulty of breathing and a sense of pressure in the chest. He could lie only on his back. The cough resembled the grunting of hogs. When seen by Dr. E., no pulsation was perceptible in the wrist or ankle, in the brachial or femoral artery. Percussion over the sternum was markedly dull. He died half an hour subsequently, just after returning from the water-closet. There was no rupture or extravasation of blood. The heart was healthy, though filled with blood. The lungs were much congested. Other organs were healthy.

Dr. *Peaslee* called attention to the fact that, in this case—as in almost all cases in which death occurs without rupture of the aneurism—the usual amount of *hypertrophy* of the heart is not found. The usual hypertrophy is desirable, as securing the circulation of the blood through the aneurismal sac, though the friction is increased by the disease. And we may learn from this case the importance of insisting on the strictest rest on the part of the patient, in all cases of aneurism of the aorta in which the usual amount of cardiac hypertrophy is not known to exist.

Dr. Allyn exhibited, for Dr. Van Buren, the genito-urinary organs of a patient operated upon for stone. He was admitted to the hospital Oct. 10th, having been long a sufferer from this affection; and having had an operation performed a year and a half previously, when some calculi were removed. Dr. V. B. operated on the 16th of October, removing fragments of stone. The patient died the same day from prostration. The coats of the bladder were found greatly thickened, and there was a large sac in the prostatic portion of the urethra. Near the opening of the right ureter, a sacculus was discovered, containing a calculus. On the opposite side, near the opening of the left ureter, a second sacculus was found, communicating with a cavity, probably an abscess. The ureters were dilated, and a calculus was found in the right kidney, the pelvis of which was in a state of chronic inflammation. In the left kidney there were indications of inflam-

mation, and at its summit there was a small urinary cyst. In the membranous part of the urethra there were one or more fragments of stone.

Dr. Batchelder asked if there was any way of diagnosticating a sacculated stone, and was answered by the negative.

Dr. Markoe presented a portion of a spleen taken from a German girl, stabbed eight weeks previously. The instrument entered just below the tenth rib on the left side, at a point equidistant from the anterior and posterior median line. Moderate hæmorrhage ensued, but there was no evidence of internal bleeding. A day or two after admission to the hospital, symptoms of peritonitis, mingled with those of hysteria came on, which were controlled by opium, and gradually disappeared. When far advanced in convalescence, fever came on, and was traced to moral causes, following a violent rage; the patient afterward assumed a different aspect. Her countenance had the hue of malarious infection, and this led to the suspicion of spleenic disturbance. Hectic ensued. Pain and tenderness were complained of over the side for a space of six inches up and down, and she rapidly failed. Till within two or three days of death, the lung was unaltered in its physical signs. Pneumonia of the lower lobe was then revealed; purulent matter was expectorated; and the patient died from suffocation.

At the lower part of the lung an abscess of the size of a small orange was discovered, in the track of the wound. Below the diaphragm was a second much larger abscess, connected with the first by a cribriform communication. Imbedded in this cavity lay the spleen, bathed in pus. Its lower part exhibited a fibrinous condition, with a thickened peritoneum. Its upper part was healthy. The connection, if any, that existed between this condition of the spleen and the marked pallor of the countenance, is the important feature of the case, and worthy of a close investigation.

Dr. Macready presented the uterus of an elderly woman, who died of cancer of the lung. There was upon it an appearance of a cicatrix following rupture of the uterus; but Dr. Metcalfe remarked that in a similar case the appearance was produced by an enlarged and atrophied blood-vessel, and it was referred for examination.

Dr. Hutchinson exhibited a portion of the genital organs of an unmarried female, about forty years old, who died of cholera, August 12th. There was entire absence of the uterus, Dr. H. gave a synopsis of thirteen additional cases of a similar character, collected from various journals. In some of these, the uterus may have existed in a rudimentary state.

Dr. Bauer spoke of a well-developed woman in whom no uterus could be detected, on careful examination. There was a small opening near the sternum, from which a serous fluid exuded once a month.

Dr. *Hutchinson* also presented a gall-bladder entirely filled by two gall-stones.

PART II.—REVIEWS AND BIBLIOGRAPHY.

Anatomical and Physiological Observations. By JOHN STRUTHERS, M. D., F. R. C. S. E. Part I. Edinburgh: Sutherland & Knox, 1854. 8vo. pp. 238.

WE are indebted to the author for the opportunity of reviewing this interesting series of papers. They have appeared, from time to time, in the Edinburgh Monthly Journal, and have been reissued in their present form by the author, with additions, notes, and emendations.

It would be superfluous to enumerate the titles of all the articles contained in this first part; they will well repay perusal, as they are clearly and logically written, and treat of subjects of equal importance to both physician and surgeon. But there are one or two of them which we desire specially to notice, as possessing some peculiar novelty and value.

The first article is concerning the *supra-condyloid process* of the human humerus. Some of our readers may be familiar with this process—to those who are not the following extracts will convey a clear conception, even without the aid of the diagram which accompanies the author's description:—

"A few instances have been recorded in which the humeral artery and median nerve continued downwards in a direction towards the internal condyle; above which, in order to gain their usual position in front of the elbow, they passed around a peculiar process, there developed from the humerus, as if for the purpose of affording them protection."

"This singular arrangement has occurred comparatively so often, of late, in the subjects dissected in my rooms, as to induce me to call more particular attention to it, since it is one of some importance to the surgeon, and is interesting, also, from the analogy it presents to the usual arrangement of these parts in certain animals."

"In many animals—amongst the Quadrumana, Rodentia, Edentata, Marsupialia, and more especially the Carnivora—the median nerve and humeral artery pass through an opening in the humerus, which is formed by an arched process crossing obliquely the inner surface of the bone, close above the internal condyle."

In those instances noted and recorded by Tiedemann, Knox, Quain, and this author,—

"The osseous portion" (or the process in question) "arose at a distance from the internal condyle, varying from an inch and a quarter to two inches and a half, and nearer to the anterior than to the internal border of the humerus. It then curved downwards and inwards, and—in none of the above instances having exceeded three fourths of an inch in length—gave attachment to the ligament, which, stretching in the same direction, joined the line close above the condyle, and thus completed the arch."

This remarkable process has been found, in some instances, in one arm only; in others, in both. It is seen in children and adults—in the male and female subject. It was very readily felt before dissection of the parts, even in the instances in which it was shortest,

"And the detection of this—in the preliminary examination, in a case where the operation was about to be performed—would, together with the pulsation, and the effect of pressure on the artery or arteries, at once indicate the existence of the variety in question to one who was aware of its occasional occurrence."

In another paper on this subject, which the author justly considers as one of importance, he tells us, that the relation of the process to the surface and borders of the humerus is constant, being always placed on the internal surface, either midway between the internal and anterior borders of the bone, or a little nearer to the latter; and the ligament which completes the arch has to pass downwards and inwards to join the intermuscular septum above the condyle. Behind the process is a groove, not always present, but very frequently observed. The artery does not always accompany the nerve in passing under this arch, and sometimes it is not the main trunk which passes under it, but a large interosseous branch; this is also the case in the lower animals, and has led to the conclusion, in the author's mind, that it is intended, in the latter case particularly, more for protection of the nerve than of the artery. This groove also, just mentioned, does not seem to have any relation to the position of a nerve or artery, nor does it appear to be formed to serve any purpose as a groove, but is the result of the formation of two ridges giving attachment to the intermuscular septum, and to the tendinous origin of the *brachialis anticus*. Mr. Struthers has dissected this process in the cat, the lion, and the ichneumon, in which it is found as a distinct foramen in the humerus, the arch being entirely osseous.

It has frequently occurred to us that those persons engaged in teaching and studying anatomy would confer great benefit on science by carefully noting and *promptly recording* all the varieties of anomalous formation in the several structures, and distribution in the vascular and nervous systems. An accumulation of facts would thus take place, the individual peculiarity of which would, when viewed in numbers, prove fruitful sources of anatomical and physiological inquiry.

In illustration of this, we may cite a curious fact noticed by our author. He says, "There is no separate bone in which the difference between the male and female (or at least the muscular and less muscular) is usually more striking than the humerus. In articulating four pairs of these humeri to each other, I noticed the curious fact, in three of them, that the right is longer than the left. In one pair, male, the difference is a quarter of an

inch; in the other two, female, it is as much as half an inch. It would be interesting to ascertain whether the right humerus is generally thus longer than the left.

The next paper which we shall notice at present, is a highly practical one on local blood-letting, being an anatomical inquiry into its mode of action in affections of the internal viscera. In commencing the inquiry, he assumes two points as the groundwork of his argument:—

"1st. That the relief in local blood-letting is through the blood-vessels or vascular system, and not through nervous agency. 2d. That, as blood can come from one part to another only by blood-vessels, there can be no special relief by local blood-letting, unless the blood-vessels of the one communicate with the blood-vessels of the other."

Then he proceeds to demonstrate that in the case of the abdomen and chest there is no direct or collateral vascular connection between the contained viscera and the walls of those cavities. There is a partial connection only in the case of the anastomosis along the rectum and down to the anus, by which the vessels of the perineum communicate freely with branches of the superior hæmorrhoidal artery and vein. An arrangement which, he states, has led to and justifies the French practice of leeching the perineum to relieve the abdominal viscera. He draws the following conclusion:—

"It appears, then, that local blood-letting cannot affect the viscera in the abdomen or chest, except through the general circulation; and that, therefore, these blood-lettings are general and not local, according to the ordinary sense in which the term local blood-letting is employed."

In the case of the head, the connection or communication is more complete, especially in the lateral and posterior regions; from which he infers, "that by leeching the scalp, especially behind the ear, the sinuses of the dura mater and veins of the brain may be relieved, and that as directly, though not so rapidly, as by the method of opening the external jugular vein."

He therefore does not include the brain amongst the internal viscera which cannot be specially relieved by local blood-letting, although, at the same time, it is not necessarily so from the mere fact of its lying inside, opposite to where the treatment is applied externally.

The following is a summary of the practical inferences he draws from his investigations on the *modes in which local blood-letting may act*:—

"1st. By the direct abstraction of blood through the anastomosing vessels between the affected and the bleeding part, and it matters not whether this be by the veins or the communicating arteries; this we may call *draining*. 2d. By lessening the quantity *going to* the affected part, by creating

an increased flow or determination elsewhere. This is the revulsion or derivation of authors, and we may call it *counter-draining*."

He then goes on to show, that in order to obtain the full effect of local blood-letting, it must not be applied too far from the affected part; and discusses the question, whether, with the views he enunciates, the common practice should be altered. This he sustains, and on the following grounds: First, that we cannot be sure of the exact situation and limits of the disease. He thus argues:—

"There is pain, as if in the liver. Is the affection one of the liver itself, or of one of the serous layers of the diaphragm, or of the parietal peritoneum? There is pain as if in the kidney. Is it in the kidney, or in some part of the wall, or in both? We cannot be sure, and therefore we must treat the affection as a regional one—as an affection of, or in, the right hypochondriac region in the one case, and of the lumbar region in the other. If the viscus alone be affected, the blood drawn from over it will, at least, relieve it *as much* as a similar quantity taken from some other part would do; and if the wall also should be affected, or be the entire seat of the disease, the patient, without running the risk of a better practice, has had the benefit of the doubt."

It seems to us that this is rather limiting our power of diagnosis, in the case of the kidney particularly; for in inflammation of this viscus we surely possess other pathognomonic signs besides the local pain. The argument, however, as far as the practice of blood-letting is concerned, remains the same, as a general blood-letting would answer the purpose as well, if we do not give some weight to the effect of general constitutional shock in the latter mode. The advantage of the local method being, as we conceive, the removal of the requisite amount of blood from the system, without the immediate impression on the other organs, and particularly on the nervous centres.

"We can readily understand," says the author, "how experience may have established the superiority of the local blood-letting in affections of the chest and abdomen generally, because we know that in a large number of them the pleura and peritoneum are involved to our certain knowledge."

"With reference to the abdominal and thoracic viscera, in a case in which the practitioner feels assured *that the affection is limited to the organ*, it would appear that it matters not where or how he bleeds, feeling assured, that from whatever part he takes the blood, whether by the leech, the cupping-glass, or the lancet, he will reach the affected organ only by having withdrawn so much blood from the general circulation."

He maintains that the prudent and proper practice still is (on the grounds already stated), "to apply the treatment over the affected part." His general conclusions being,—

"1. Local blood-lettings on the chest and abdomen are truly so, as far as the *wall* is concerned, but can act on the *viscera* only on the principle of general blood-letting.

"2. But that it is proper to continue the local practice, because the wall is often affected along with the viscus, to our certain knowledge, and we are often unable to decide whether the wall is not, in whole or in part, the seat of disease.

"3. And that, therefore, the physician is not at liberty to depart from the local practice, unless he could be certain that the affection was limited to the viscus."

We would also commend the paper on the semilunar valves of the heart as being essentially practical in its bearing, and wish we had room to make a résumé of it also.

Those who are engaged in teaching anatomy and physiology, as well as the student, will gain much by a perusal of these valuable papers—they will suggest a train of inquiry and investigation, even if they do not add to their present stock of knowledge. ‡

Manual of Human Microscopical Anatomy. By A. KÖLLIKER, Professor of Anatomy and Physiology in Würtzburg. Translated by GEO. BUSK, F. R. S., and THOMAS HUXLEY, F. R. S. Edited, with Notes and Additions, by J. DA COSTA, M. D. Illustrated by 313 engravings on wood. Lippincott, Grambo & Co. One vol. octavo, pp. 802.

The first 435 pages of this work have already been noticed in the MONTHLY, though under a different title—"A Manual of Human Histology, &c."* The whole work of Prof. Kölliker has been published by the Sydenham Society, in 2 vols., it having been translated by Drs. Busk and Huxley. The first vol. corresponds to the 435 pages just mentioned of the present work; the latter including both vols. of the Sydenham Society, with notes and additions by Dr. Da Costa. A very important addition by the American editor occurs on the 43d page, where he has given a table for the reduction of Paris lines and millimetres to fractions of an English inch; which alone should be the standard in this country.

We think, also, that the title adopted by Dr. Da Costa is more accurately expressive of the character of the work—except the first 118 pages of the American edition—than that of the author himself. Histology is the *minute* or *microscopical anatomy of the tissues;* while this work, except the part mentioned, is the minute or microscopical anatomy of the *different organs.* It is true that, in some instances, the word "histology" and the

* February Number, p. 117, &c.

phrase "microscopic anatomy" may become nearly convertible terms; yet they are never precisely so. For instance, the histology of muscular fibre and the microscopical anatomy of muscle, are terms nearly allied. And yet they are by no means identical. The histology of muscular fibre merely implies the description, with the aid of the microscope, of the fibre or tissue peculiar to muscle, when isolated from every thing else; the microscopical anatomy of muscle implies all this knowledge, indeed, and also describes all the other elements entering into the structure of a muscle, as the perimysium, the tendon, the vessels, and the nerves; and the relations of the tendon to the muscular tissue, on the one hand, and the bone on the other. In other words still, *histology* merely describes the isolated *tissues; microscopical anatomy* describes the *organs* as they are found, made up of tissues.

Prof. Kölliker entitled the first 118 pages of this work "The General Anatomy of the Tissues." We have before given our reasons for preferring the term "General Histology."* The rest of the work he terms "Special Histology;" and which, in regard to certain subjects treated, is correct, and in respect to others, not so. *Ex. g.* He begins with the skin, and gives its *microscopical anatomy*,—since it has no tissues entering into its structure which are peculiar to it,—and at the same time, most singularly, regards the subcutaneous areolar tissue, or superficial fascia, as a part of the skin itself. Next follow the osseous and muscular system, of both of which he gives the microscopical anatomy, including also the special histology, as each of these includes a tissue not found elsewhere than in bone and muscle respectively.

We therefore consider the present title more appropriate than the author's, as expressing the character of the work as a whole; and the first work expressly on Human Histology, in the English language, is yet to appear. And as histology constitutes the very basis of the now vast and vastly important department of microscopic anatomy, we consider that the time has already arrived when such a work is demanded, and can be appreciated by the medical profession in this country.

It may, however, savor of inconsistency, that while the American editor has, as we think, improved the title by naming the work a "Manual of Microscopical Anatomy," he still retains the author's heading of "Special Histology" on every alternate page, beyond the 118th, of the work before us.

Having previously given expression to our opinions respecting the first 435 pages of this volume, as before explained, we now proceed to an

* *Ut supra*, p. 119.

analysis of the remaining portion—the part corresponding to the second volume by the Sydenham Society.

This portion includes the minute anatomy—

I. Of the digestive organs;
II. Of the respiratory organs;
III. Of the urinary organs;
IV. Of the sexual organs;
V. Of the vascular system;
VI. Of the higher organs of sense.

I. Commencing with the oral cavity, or mouth, the author describes all the different subdivisions of the alimentary canal in succession, and the glands which are associated with these different portions. Then follows an account of the liver, pancreas, and spleen. We notice the following points as in advance of, or in some way differing from, the opinions on the same subjects, which have already been published in this country in the English language, or as deciding mooted questions in histology.

The *mucous membrane* lining the alimentary canal is said by the author to consist, like the skin, of these three layers: (1) Epithelium, (2) the mucous membrane proper, and (3) the *submucous areolar tissue.* He does not admit that a "basement membrane" exists to form a special layer of a mucous membrane, any more than he does of the skin. The submucous areolar tissue of the soft palate contains large masses of fat in it, and upon the tongue the proper mucous membrane (the *corium*, we would call it) is firmly attached by many muscular fibres, extending from it into a white, very solid, and dense, tendinous layer, immediately contiguous with the upper longitudinal muscular fibres, and which Zaglas has described as the *fascia linguæ.*

The *epithelium* of the mouth is of the pavement variety, consisting of many superimposed layers of roundish, polygonal, and more or less flattened cells, the deepest layers being of elongated and larger, and vertically-disposed cells, while the superficial layers are composed of *epithelial plates*, or cells flattened into scales with rounded corners. Though thick, the epithelium of the mouth is very permeable to fluids of very different properties; the more so, however, where, and in proportion as, the layer of the *plates* in particular, is thinner; it also allows the plasma to traverse it, from the blood-vessels into the buccal cavity, without becoming itself detached.

The author gives the most accurate and minute description of the microscopical anatomy of the *tongue*, to be found in our language. His account of the papillæ agrees essentially with that of Todd and Bowman. He, however, adds some account of the mucedinous fungi which constitute

the "fur" on the tongue in some diseases attended by great debility. This fungus is probably (as remarked by the American editor) the one named "oidium albicans" by Robin.* This was also discovered by Prof. A. Clark, of this city, as we stated in a former number of the MONTHLY; and where the sulphurous acid was also recommended as destructive of all parasitic vegetation.†

Prof. Kölliker thinks the *microscopic ganglia* discovered by Remak upon the branches of the glosso-pharyngeal and the gustatory nerve, and which the latter believed to be related to the glands of the tongue, are also probably related to its sensation.

We have next a full account of the mucous and the follicular *glands* of the oral cavity. The author finds no muscular fibres in the former, nor in their excretory ducts.

The *follicular* glands include those at the base of the tongue, from the papillæ circumvallatæ to the epiglottis, and the tonsils. A clearer and more definite idea of the structure of the former is given, than has hitherto been done by any author. Both, however, contain, *under* the mucous membrane lining the cavity or cavities visible to the naked eye, "large, completely-closed capsules $\frac{1}{113}$ to $\frac{1}{43}$ inch in diameter, round or elongated in form, presenting a whitish color, and closely resembling the capsules of Peyer's patches, the solitary glands, the vesicles of the spleen, and of the lymphatic glands." While Prof. K. admits that these capsules may excrete a substance into the cavities of the glands without any dehiscence (as no ruptured ones are ever found), and from this the peculiar secretion of the follicular glands may be formed, he thinks, on the whole, that the latter is formed independently of them. At least, a fact analogous to this supposition is, that of the secretion of pus upon mucous membranes which are still *covered by their epithelium* (p. 463).

Prof. K. confirms the statement of M. Bernard, that the secretions of the three pairs of salivary glands vary in their properties. That of the parotid contains no mucus; those of the submaxillary and sublingual gland do contain it. But neither the mucous nor the salivary glands secrete any *formed* products. The "mucus-corpuscles" of authors are products of the mucous membrane of the oral cavity; being "exudative corpuscles, and consequently totally distinct from epithelial cells." He regards their formation as analogous to that of the pus-corpuscles in catarrh, which also very often takes place upon unbroken epithelial surfaces. Hence, they are almost entirely absent in many individuals; while in others, subject to irritation of the mouth, they are very abundant.

In regard to the *teeth*, Prof. K. states that the dentinal *tubuli*, or canals,

* Histoire naturelle des Vegetaux parasites. † March No., p. 239.

have special walls, with a thickness rather less than their diameter, connected together by a matrix. The *apparent* walls usually seen in transverse sections of dentine are not really such, but *rings*, resulting from viewing a certain length of the canals in the more or less thick sections,—their undulating course giving the walls a greater apparent thickness than they really possess (p. 472). The "interglobular spaces" of Czermák are particularly described, and shown to be filled, in the natural state, by a substance which dries up in their sections, and thus admits air. The author has never discovered the membrane said by Berzelius and Retzius to exist between the dentine and the enamel. He regards the enamel-fibres as *not* indicating a cellular composition; finds no intermediate substance uniting them together; nor any constantly-existing canals between them, though cavities of various kinds are not unfrequently found in the enamel. He verifies the existence of the membrane lying upon the external surface of the enamel, which was discovered by Mr. Nasmith; and describes it as "a calcified, structureless membrane, $\frac{1}{2500}$ to $\frac{1}{1400}$ inch thick, remarkable for its resistance to chemical agents (even to boiling, concentrated hydrochloric, sulphuric, and nitric acids)," and hence admirably adapted to protect the crown of the tooth. He considers that the "cementum" is developed from "that portion of the dental sac which lies between the pulp and the enamel organ." We still think there are stronger reasons for the belief that it is developed from the periosteum inclosing the tooth within the alveoli.

In regard to the *pharynx* the author points out the difference, in regard to the epithelium, between the upper (respiratory) and the lower portion; and imparts much valuable instruction in the following passage: "Follicular glands, simple as well as compound, analogous to the tonsils, are met with in the vault of the *pharynx*, where the mucous membrane is closely attached to the base of the skull. Here a glandular mass, stretching from one Eustachian opening to the other, and from one to four lines thick, may constantly be met with. It is, upon the whole, smaller; but otherwise its structure resembles, in all essential respects, that of the tonsils" (p. 500). This glandular mass is often almost the exclusive seat of catarrh in the head (so called by patients); and which we have often succeeded in promptly removing by applications of a caustic solution to the exact seat of the disease.

Contrary to the general opinion that the muscular layer of the œsophagus consists of smooth or non-striated muscular fibre, Prof. K. finds that the transversely-striated fibre alone is found in the upper third of this tube, and until it enters the thorax. Then smooth fibres (non-striated), like those of the intestine, make their appearance, first in the circular, and subsequently in the longitudinal layer; the isolated, striated fibres are met with, according to Ficinus, even down to the cardia.

In regard to the *stomach*, the *small intestine*, and the *large intestine*, we find nothing particularly interesting to those already familiar with the work of Drs. Todd & Bowman.

In regard to an interesting point in the minute anatomy of the *liver*, a hiatus still exists. We allude to the question as to the relation of the terminal subdivisions of the hepatic duct to the cells of the liver. Until the question can be finally decided, Prof. K. hazards the opinion that the "finest ducts impinge directly upon the columns of the network of hepatic cells, so that their cavity is terminated by hepatic cells." Thus, at least, the bile secreted by the cells may easily find its way from the ruptured cells into the hepatic ducts.

But little is said of the structure of the *pancreas;* but the deficiency is supplied in respect to the *spleen*. Prof. K.'s discoveries in regard to the structure of this organ are already well known in this country through the Cyclopedia of Anatomy and Physiology, and need not be reproduced here.

But we have already exhausted our space, though we have called particular attention thus far to only about one half of that part of the volume which we had not previously analyzed.

It is sufficient, however, to say of the remaining portion, that the subjects remaining are treated in a similar discriminating, though less prolix manner; and that the work, as a whole, entitles the author to the highest rank as a microscopic anatomist and histologist.

The very profundity and extent of the work, however, unfits it for a text-book for the use of medical students; but we may now say of the whole, as we formerly remarked of the first volume, that we "cordially recommend it to all teachers of anatomy and physiology, and to all who would become accomplished anatomists and physiologists."

The notes of the American editor have, moreover, somewhat enhanced the value of the original work; they being at the same time also not very numerous, and generally possessing the merit of brevity. The woodcuts are the same used in the publication of the original German edition.

†††

Inquest on the Death of Agnes E. Lottimer, before George C. Ball, Coroner, Brooklyn, N. Y. New York: Baker, Godwin & Co.

Being of the number of those who never despair of the results of a conflict between truth and falsehood, we rejoice at the appearance of this pamphlet. It contains a full and fair report of the evidence given in an inquest held on the body of a little girl, who, after having been under the care of a homœopathic doctor about two months for an attack of fever and

ague, was, to his great surprise, seized, first with convulsions, then with hæmorrhage from the lungs, which last proved fatal in a few hours. This occurred at a time when the parents were assured by the doctor that their child was getting well. The evidence most clearly and unequivocally establishes that this child fell a victim to an attack of intermittent fever of no great severity, and which, humanly speaking, *could have proved fatal* only by being allowed to run its course without any interference whatever. Surely, if any thing can prove the utter inefficiency and futility of the homœopathic practice, this will do it. Here is a child, in the highest health, attacked by a disease, hundreds of cases of which are cured, every summer, in every part of our country, by physicians, and by the people themselves, with a dose of castor-oil and a few grains of quinine; yet it runs on two months, and then proves fatal; and a postmortem examination establishes beyond the possibility of doubt or cavil, that the death was entirely attributable to the fever and to those congestions which every decently educated physician knows will always occur when intermittent fever is allowed to run its course unobstructed for weeks and months. The curability of simple intermittent fever by quinine is a thing so entirely familiar to every intelligent person, in and out of the profession, that we do not doubt but this utter failure of homœopathy will open the eyes of many who have been deluded by the pretensions of these quacks. It cannot fail also to shock the moral sense of the people to find a doctor to whom the powers of quinine are familiar, allowing his patient to suffer week after week, and finally to die, without giving a trial to that mode of treatment which the experience of two hundred and fifty years has proved to be effectual?

And why is not this time-honored remedy given? It was not according to his system, and the system must be supported, let what will happen to the poor patient.

But the value of this Report does not depend entirely, nor, indeed, in our view mainly, on the proofs with which its pages abound, of the utter inefficiency of homœopathic remedies; the exposure which the quacks made of their own stupendous ignorance is even more likely to aid in the good work of bringing their system into the contempt it so richly deserves. Dr. P. P. Wells, the person who attended Agnes Lottimer, being asked what was the probable source of the blood (about two pints) that burst from the mouth and nose of the poor girl a few hours before she died, said, "The hæmorrhage might have come from rupture of the longitudinal sinus, coming through the ethmoid plate." Next day, the doctor was, we believe at his own request, recalled, and as though desirous of elaborating his blunder, and stereotyping his ignorance, he said, "The blood, if proceeding from a rupture of the longitudinal sinus, might escape through the cribriform plate of the ethmoid bone into the nasal cavities. This only in case of soft-

ening of the brain *and its membranes.* The brain and *its membranes being softened*, I see no difficulty in a certain amount of pressure forcing the blood through the opening in that bone." We do not believe that this stupendous blunder can be paralleled in the annals of professional ignorance. Nay, we doubt whether in their pictures of Sangrados or mock doctors, Le Sage or Moliere ever imagined ignorance so extravagant.* After this it will excite no surprise to hear this learned pundit speak of mumps without any pain, swelling, or other affection of the parotid gland, and of the translation of this mumps first to the membranes of the brain, and then to the lungs. For further displays of Dr. P. P. Wells, we refer our readers to his evidence *passim.* But another taste of his quality was afforded by his conduct after one of the adjournments of the inquest. Professors Parker and Gilman had been examined as to the hæmorrhage from the longitudinal sinus through the ethmoid plate, and, of course, spoke of its impossibility, though they did not characterize as it deserved the ignorance of Wells, as we think they should have done. Now, see how truly ignorance begets impudence! After the inquest was adjourned, and Drs. Parker and Gilman had left, Dr. Wells rose and expressed his surprise that gentlemen occupying the places held by Professors P. and G. could be ignorant of the possibility of hæmorrhage from the longitudinal sinus through the ethmoid bone. Let the annals of quackery, from Paracelsus to this hour, be searched for a parallel for the modest assurance of Dr. Parkhurst P. Wells.

We hope that this Report will be extensively circulated, and that medical men into whose hands copies may come, will distribute them among their patients and friends. The exposure of the nothingness of homœopathy, and the ignorance of its supporters, will do good.

J.

* There is a story connected with this hæmorrhage from the longitudinal sinus through the ethmoid plate, that is too good to be lost: While the inquest was in progress, a report of the evidence, prepared by Dr. Dunham, one of the homœopathic witnesses, was published in the Evening Post; but neither in the testimony of Dr. Wells, nor in that of Professors Parker and Gilman, did one word about the source of the hæmorrhage appear. The young quack had the grace to be ashamed of the ignorance of his senior.

PART III.—CHRONICLE OF MEDICAL PROGRESS.

[The abstracts and translations found under this title are made expressly for the AMERICAN MEDICAL MONTHLY.]

Clinical Lecture on Stricture of the Pyloric Orifice of the Stomach, masked by Symptoms resembling Ileus; Diagnostic Marks; Case in Illustration. By Dr. O'FERRALL.

AMONGST the embarrassments incidental to the study of abdominal diseases, there are none which require more vigilance than those which arise from the simulation of acute affections of the viscera by the urgent symptoms which occasionally attend the advanced stages of a chronic disease. The clinique of every session brings its examples, in proof of this proposition. A patient is brought into the hospital, laboring under the symptoms of ileus; and it is often difficult, through the mists of an obscure history of the case, to discern the evidence of a chronic thickening of some portion of the colon or rectum, upon which the urgent phenomena depend. Now, here, at least, the existence of obstructive disease may be occasionally presumed, although the uncertainty as to the duration and seat of that disease may raise a question as to the manner in which it may best be treated. A case of ileus, depending on some acute inflammatory action, will require one course of management, while a case arising from either the spasm or atony of individual portions of the intestinal tube, may demand another. The works of the celebrated Dr. Abercrombie abound in practical lessons of this kind. But modifications of treatment, differing somewhat from either, will be suggested by a previous knowledge of the fact, that chronic changes have been progressing to a degree capable of interfering with the functions of the part.

All those points may require elucidation, although, as I have said, the fact of the existence of obstruction of some kind, in some portion of the tube, may be satisfactorily established. In all such cases the difficulty is limited to making a differential diagnosis between the several forms of ileus, and deciding which of them is represented by the case then before us. But you will occasionally meet a difficulty of another kind, namely, that of distinguishing from ileus, in any of its varieties, a case which, bearing a strong resemblance to it, is, however, a pathological condition of another kind. The proposition to the consideration of which, on the present occasion, I wish to direct your attention, is this, that the prominent symptoms of ileus may exist, without any functional or organic obstruction, in any portion of the intestinal tube, below the stomach; that prolonged constipation, with

constant vomiting, with pain referred to the umbilical region, and a tumid abdomen, may constitute a group of symptoms, having no other origin than stricture of the pyloric orifice of the stomach.

To those who have not had the advantage of your extensive opportunities of witnessing those cases, the proposition may be startling; but you will recollect how often, during the progress of a well-observed case of chronic disease, I have asked you to consider what diagnosis you would have made if you had, at certain stages of the case, seen the patient *then for the first time*. Now, in the matter before us, you will find no difficulty in recognizing the truth of the following sketch.

A patient complains of uneasiness after food, and this gradually assumes the form of pain referred to some portion of the epigastric region. Sooner or later, relief is obtained by rejection of the aliment. As the disease advances, the vomiting becomes more frequent, and constipation becomes a remarkable feature in the disease. The evacuations become more rare, as the quantity of food suffered to pass through the pylorus becomes diminished. The feculent matter becomes solidified in the colon, and a certain amount of flatulent distention takes place in the parts above it. Here, then, you may have prolonged constipation with vomiting and pain; but no practitioner could possibly think of ileus in a case so clearly pointing to its real nature. But continue to trace its progress a little further. The locality of the pain is no longer the same. It is now referred to a point lower down in the abdomen, and the upper half of this cavity becomes the seat of tumescence, the consequence of habitual distention of the stomach by profuse liquid and gaseous secretions into its cavity.

If now seen for the first time, and that, in addition to prolonged constipation, vomiting, and pain referred to the umbilical region, you have, also, intumescence of the whole abdomen, the case will be less clear, unless the patient accompany the description of his present sufferings with a history of their antecedents, capable of making them properly understood. It may be supposed that the peculiar emaciation of the patient's features might be sufficiently well marked to enable you to recognize the expression of pyloric disease; but you will not find this test so conclusive as you might imagine; for the expression alluded to may actually be mistaken for the collapsed and sunken face of ileus. Constant vomiting, from whatever cause, gives a collapsed appearance to the features; and it will require close observation to enable you, at first view, to distinguish that which depends upon exhaustion from this cause, from that which belongs to a previous disease.

There is, however, one symptom which, even without the history of the case, should awaken suspicion as to its real nature. It is a *transverse wrinkle or fold* in the integuments, and which generally traverses the middle of the umbilical region. Now, this transverse fissure is by no means

pathognomonic of pyloric or hepatic disease. Its signification is simply this, that, from some cause, the intestines are not permitted to occupy their usual share of the upper half of the abdomen, and are habitually pressed down, and made to form a separate projection or swelling in the lower half of the cavity. This condition may occur as a consequence of some form of organic disease of the liver or omentum; but then you will find this upper half of the abdomen to yield a dull sound on percussion, while, in the case of great distention of the stomach, the sound is remarkably clear. When both diseases coëxist, the limits of either will be marked by its corresponding modification of this physical sign. This transverse sulcus may be present also in that curious state which, in a former lecture, I have described under the name of *Mimotic Tympany;* but, in the latter case, it is rather a transverse depression than a fissure, and, occurring as it does in very young persons, is not at all likely to create difficulty, or lessen its value as a symptom in the disease of the pyloric orifice of the stomach. Indeed, the soft, pliable, and well-nourished integument of a child could not possibly assume the same deep wrinkled appearance which belongs to the case of an adult, gradually wasting away from inanition. There is another appearance presented by the upper half of the abdominal cavity, which is very characteristic of obstruction in the pyloric orifice of the stomach. It takes place at uncertain intervals; and if it happens to occur at the moment when the abdomen is uncovered before you, it will not fail to suggest its proper explanation. The appearance to which I allude, is a peculiar undulatory movement in the parietes of the stomach; a sort of peristaltic movement, by which the contents are, from time to time, propelled, with an audible gurgling, towards the pylorus, and as often are returned to the great end of its cavity on meeting with the usual resistance. This remarkable movement sometimes developes the external appearance of that peculiar division of the stomach into two portions, which physiologists believe to indicate a separate function belonging to each. Additional assistance may be obtained by percussion over the organ. The peculiar tympany will be elicited all over the stomach, and will mark its limits. It will also conduct the fingers gradually to the point where this phenomenon ceases; and here is generally the seat of the pain. A careful and gentle manipulation will also detect in this situation, even through the general swelling, a deep-seated induration, which belongs to the altered pylorus, and indicates its change of place. The distinction between pyloric tumors and other tumors, when occupying the middle portion or lower half of the abdomen, may often be made in this way.

Another aid in diagnosis may be found in a careful examination of the fluid ejected from the stomach. In disease of the pylorus, I never saw the contents of the duodenum ejected. Bile is never seen after the period when

the stricture is formed; and the admixture of feculent matter, which is occasionally met with in ileus, is never observed here. Thus, the character of the fluids ejected may, in doubtful cases, afford negative information of great value; but they will occasionally present an appearance often connected with, though not conclusive of, organic disease; the copious mucous secretions are then mixed with that dark sanguineous exudation, which is called "coffee-grounds." This characteristic vomiting may, it is true, not be had in evidence, on your first visit, or it may be absent in the particular case, and the undulatory movement of the stomach may not take place at the actual moment when the surface is exposed to your view, and the transverse fissure alluded to may be, in some measure, obscured by the general swelling; but, when these three phenomena are present, they should suggest the probable existence of organic disease of the stomach, whatever may be prominent symptoms in the case. The record of a case, lately under your observation in Lawrence's Ward, will recall to your recollection the value of those symptoms in conducting the inquiry:—

Case.—A man, 60 years old (James Lannery), was brought to the hospital on the 2d of April, 1854. He was considered, by the medical man who had seen him, to be laboring under obstruction of the bowels. Every medicine administered had been rejected by the stomach, and had failed to produce evacuations from the bowels. The poor man was very deaf and stupid, and gave no information in his own case.

The history extracted from those who brought him to the hospital was this:—He was the owner of a turf boat, part of the cost of which still remained unpaid. The boat plied on the Grand Canal, and its station was at Harold's Cross, where the cargo of turf was generally sold. His wife resided near the bog, twenty miles from town, and was in constant attendance on a son dying of consumption. The poor man was, consequently, much neglected, and was accompanied only by two men, assisting to manage the boat. They stated that he fell ill about a fortnight before, and, from that time, never left the miserable cabin where he lay, complaining of pain in the belly, and constantly vomiting. They, at length, induced a poor woman in the neighborhood to receive him into her lodgings; but the nature of his illness, and the advice of a medical man, made her determine to have him removed to hospital. It was stated, that he had had no evacuation from the bowels for eight days, and that nothing remained on his stomach. On admission, he was ordered small doses of calomel, at short intervals, the attendant having ascertained that there was no hernial protrusion or tumor, in any of the usual situations.

On the next morning, I saw him. No evacuation from the bowels had yet occurred. His deafness rendered it almost impossible to communicate

with him. His tongue was florid, but not dry; his pulse was 108, small and easily compressed; his wrist was dry, and his hand felt emaciated.

The abdomen, uncovered, was tumid and tympanitic, and bore pressure everywhere, except at the umbilicus; and to this point, I learned, he had referred his pain. The swelling of the abdomen was not uniform, but seemed to consist of two portions, separated by a transverse wrinkle, in the situation where it might be expected to occur in the sitting posture, with the trunk leaning forward. This, at once, attracted my attention, and I desired to see the fluid vomited. It had just before been taken away; and I, accordingly, went to visit other patients in the ward, intending to return as soon as he vomited again. This occurrence soon took place, and, as the quantity was considerable, and it contained a proportion of "coffee-grounds" matter, my suspicion was increased. On again uncovering the abdomen, I percussed the upper half carefully, and found its resonance to be sharper than that of the lower. Tracing this resonance downwards, and to the right side, it ceased about the umbilicus; and here I could detect a deep-seated, but distinct tumor.

Pressure here was, evidently, painful, as his countenance indicated. In the course of this short examination, my attention was attracted by a gurgling noise, and distinct movement in the tympanitic swelling, just below the margin of the ribs, on the left side; the prominence became less at the extreme left of the part, while the bulging traversed from left to right, approaching the spot where the induration had been felt; the projection was here, for a moment, very great, but almost immediately began to subside, while the swelling, like a wave, returned again to the left, and the original condition was reproduced. I had now very little doubt that the poor fellow labored under stricture of the pylorus, and that the constipation was not that of ileus. Renewed attempts were made to procure from the patient an account of his previous health; but little information was obtained. He considered himself tolerably well until about three weeks ago, but admitted that he always had "a bad stomach," and that if he ate bacon at dinner, he was sure to throw it off afterwards.

It would be loss of time to recite the daily occurrences in the case, from this time to the day on which he died, the 19th of April. His strength never rallied. The bowels were opened by enemata, and the lower half of the abdomen lost its tumid appearance, giving more characteristic prominence to the upper portion, in which it was, every day, more easy to recognize the real lesions. His urine was generally scanty and deep colored; no albumen. Specific gravity, 1025.

Notwithstanding the use of every remedy, external and internal, the stomach never seemed to retain food; the quantity rejected far exceeded that taken in; and was always mixed with the dark brown matter before

mentioned. Every variety of aliment, mixed, in turns, with brandy or solid ice, were tried in vain; every medicament was employed, but failed either to allay the inverted action of the stomach or restrain the profuse secretions which filled and distended its cavity.

Necropsy.—The general emaciation was considerable; the integuments had a dry and shriveled appearance.

In the abdomen, the stomach occupied a large share of the cavity; it descended, at its great extremity, below the umbilical region, and ascended towards the pylorus, which lay behind the umbilicus. Attached to the greater curvature of the stomach was the contracted omentum, which formed the irregular substance commonly met with in such cases. The surface of the stomach had the yellowish white color and leathery consistence with which every pathologist is familiar; this thickness increased towards the pylorus, which projected in the form of a tumor about three inches long, and two inches and a half thick. The stomach, when opened, was found to contain about two pints of liquid similar to that vomited during life. The finger, passed towards the pyloric orifice, met with firm opposition. The duodenum was then divided, about three inches below its origin, and a quantity of water was poured into the stomach, and made to gravitate towards the duodenum, by holding up the parts in a position favorable to its descent. Not a drop passed from the stomach through the pylorus. A section displayed the usual tortuous or serpentine course, the alternate projections and depressions being mutually accommodated to each other. The mucous surfaces were separated only by a thin layer of reddish mucus, which blocked up the passage. The mucous membrane, when cleared, exhibited a faint red color; it was remarkably firm to the touch, but had no trace of ulceration, or breach of surface. The section exhibited the appearances usually described as hypertrophy of all the tunics and cellular tissue of the part. The liver, of moderate size, was, in color a pale brown, and, at first view, appeared to be free from morbid deposit; at length, on careful inspection, a yellow spot, slightly elevated, and not more than one-eighth of an inch in diameter, was discovered on the upper portion of the left lobe. A section showed this to be a very small tuber of the kind which, when of larger size, is generally called Farre's tuber. Numerous sections were made, in every direction through the liver, but no second specimen was met with. The spleen was rather small, and without deposit; the kidneys were healthy. Nothing remarkable in the loose viscera.

The chest contained no trace of organic disease. The left ventricle of the heart was full of blood, as might be expected from the mode of death. The organ was small, and had no valvular lesions.

Histology.—Dr. Aldridge was so obliging as to examine the specimens. Those from the pylorus and omentum exhibited the ordinary structures of

white tissues, consisting of loose fibro-areolar tissue, traversed by dense, whitish bands, and containing fat. The specimen from the liver consisted of soft fibro-areolar tissue, full of milky juice, which, under the microscope, was seen to abound in irregular-shaped, dotted cells, larger than pus globules, and mixed with oil-drops.

The morbid anatomy of this case is full of suggestive matter, but we shall have other occasions for using the materials it supplies. The question of the separate existence *of stricture of the pylorus without cancer*, has been ably treated by M. Andral; and I published, several years ago, researches made in this hospital, with a view to establish the differential diagnosis during life. Our concern at present, however, is, with the practical fact, that certain phenomena, resulting from obstructive disease of the pyloric orifice of the stomach, may simulate a case of ileus, and may, if seen for the first time, and without a clear history of their development and progress, be readily mistaken for that disease.—*Dublin Hospital Gazette.*

Considerations in regard to the Treatment of Displacement of the Uterus. By J. MATTHEWS DUNCAN, M. D., F. R. C. P. E., Lecturer on Midwifery, etc., etc.

In a late meeting at the Obstetric Society of Edinburgh, I adduced the main part of the following observations in regard to the general aspects of this difficult therapeutic question. Although originally forming part of the discussion of a communication by Professor Simpson, I am induced to publish them now by the pressing interest and importance of the question at this time.

The point of greatest weight to insist upon first of all, is the difficulty of arriving logically at conclusions, on this subject, having even moderately good claims for acceptance,—"the impossibility in these inquiries of commanding all the conditions of any experiment, or continued observation, so as to leave out one after another of those conditions in each repetition of the observation, and have an *instantia crucis* as to any one of them on the result."

In applying the numerical, along with other methods of inquiry, to such therapeutic questions, "the probability is, that the efficacy of the measures under observation will be overrated, because the desired result is the *positive* one of the recovery of patients (not *negative*, as in questions of etiology, having for their practical end the prevention of disease); we know that in almost every case, various causes besides that under trial have contributed to that result; in acute cases, especially, the salutary provisions of nature for the

decline of diseases, or, as we may very often more correctly express it, the essentially temporary nature of the diseased action itself; in chronic cases, more remarkably, the unobserved agency of other internal circumstances besides the remedy in question. Of the degree in which these causes have contributed to the fortunate event of any individual case, all candid and intelligent medical men will allow that it is very difficult to judge; and without judging of them, we can have no certain inference as to the power of any remedy."*

In the subject before us, all these difficulties, and more, exist; and we have one of the most complicated and ravelled questions in pathology to solve. The treatment of uterine displacements by intra-uterine pessaries has been now for a considerable time before the profession, and hitherto the difficulties in the way of accurately estimating the value of the treatment have proved so formidable as to deter obstetricians from entering fully into the question. A great deal has been written about the frequency and the diagnosis of these affections, and about the mechanical modes of treatment by intra-uterine pessaries, how they are to be introduced, and how used; but the value and results of the treatment have only lately been discussed. I do not here allude to the short statements which have frequently appeared in the medical press, and which have generally been summary condemnations of the practice, or equally groundless laudations of it. Such opinions have a place in the question as mere opinions, weighing on one side or the other; but they do not assist the real progress of the inquiry.

The difficulties, indeed, of this, as of many other therapeutic questions, are so great as to render any absolute or logically-adjusted resolution of it all but impossible. I may refer, in illustration, to the great question of large blood-lettings in serious acute inflammations, as one similarly complicated, and which, if even now decided, does not certainly owe this to the writings of eminent or philosophical physicians (however much influence such may justly have in guiding the professional mind), or to the debates of learned societies, or to the diligence of statisticians. This question has been decided by the clinical experience of the profession. The revolution from large and repeated blood-lettings, as formerly, to the more guarded use of the lancet, as at present, is mainly due to a gradually-acquired consciousness on the part of the leading men of the profession as to the advantages of the newer method. To say the least, no amount of writing, debate, or of statistics, could have effected this without the gradually acquired consciousness of the profession in accordance with the newer views. And assuredly this question of the treatment of displacements of the uterus, must also rest on this professional consciousness for its final arbitrement. The difficulties surrounding it yield to those of no other subject.

* Alison.

We are indebted to the fatal result of the treatment in M. Broca's and in M. Cruveilhier's cases, for the stirring up of this question in the heart of the Academy of Medicine of France; and assuredly it could not have fallen into better or abler hands. The attentive perusal of this animated and very able discussion, while it will amply repay the student, will sufficiently attest the truth of the remarks I have just made. Nothing can be clearer than that the question is not brought many degrees nearer a logical issue by this unequaled passage of arms; and it must be gratifying to reflect, that there is another bar by which the question will be tardily but solidly decided, namely, that of the general consciousness of the profession.

The chief difficulties to be kept in mind in the question before us, may be enumerated as follows:—

1. The well-known facility of all patients, and especially of females, inducing them to admit their feeling relief from treatment without good grounds. Every physician must have observed this in a thousand different circumstances; and there can be no doubt it is much more liable to happen when the physician enjoys great notoriety or *eclàt*. In the case before us, this amiable failing in females is aided by the novel character of the treatment, and the imposing aspect of the instruments.

2. The impossibility of deciding the gravity of the affection. The symptoms calling for relief in the cases considered are, painful feelings of various character and site. For the description of these feelings, and the estimation of their intensity, the physician is completely at the mercy of his patient, and is very liable to form misconceptions on the subject. Nervous and hysterical females will probably exaggerate in their statements, and not a few will under-estimate their sufferings. Nor can it be forgotten that malingering, of a modified kind, is not very rare among women in good society.

3. The impossibility of deciding what symptoms, in any case, are due to the simple displacement, and of separating these from what are caused by the engorgement or inflammation of the womb, by irritability of the womb, or of the neighboring organs, or by other more obscure, neuralgic conditions.

Under this head may be mentioned the confusion apt to arise in discussing this subject, from physicians looking at and describing cases from different "points of view." The case of a Lancashire lady, which was lately the occasion of some sharp professional correspondence, may be taken to illustrate this matter. The lady is apparently one of a class who have confidence in different doctors and practices "time about," and whose statements can be of little value. Her case was diagnosed in London by some most eminent obstetricians, as one of fibrous tumor in the back wall of the uterus. In Edinburgh, it was diagnosed by a very eminent accoucheur, as retrover-

sion. If the case had come into my hands, I should possibly have thought it was neither a case of fibrous tumor nor of retroversion, but of enlargement of the uterus. All these statements may have been correct and consonant, although at first sight different. The lady *may* have had an engorged and retroverted uterus, with a fibrous tumor in the posterior wall, and different physicians *may* have seen reason to ascribe the symptoms complained of to one or other of these different unnatural conditions. The great error in this case was the assertion of an exclusive diagnosis by one practitioner as against another. The retroversion could be diagnosed without any difficulty. The existence of a small fibrous tumor (and in such a case the supposed or real tumor must be very small) in the posterior wall of the uterus, if it do not cause deformity of that wall, cannot with certainty be contradicted, after the most careful examination during life; and great doubt will be cast over the case if the uterus is engorged and hypertrophied.

4. The impossibility of saying what part of the good or bad results observed after the treatment is to be attributed to the mechanical retention in the normal position, and what to other conditions of accident, regimen, or simultaneous and diversified treatment. The question even of death as the result of this treatment, has been in some cases successfully perplexed by arguments too ingeniously based on this dilemma. In hearing the mechanical treatment argued for, I have been amused to observe the greediness to seize upon and assert the occurrence of fatal cases from the most trivial uterine operations, such as the application of caustic, or even from inappreciable, undiscoverable causes, while at the same time the greatest pains are taken to discountenance the very idea of fatal results from the permanent intra-uterine pessaries. These instruments are admitted on all hands to cause serious constitutional disturbance occasionally, and sometimes pelvic abscess. The latter affection is well known to be sometimes unavoidably fatal. The partizans, then, of intra-uterine instruments, if they admit (as they do) that they sometimes cause serious pelvic inflammation and abscess, must also admit that they may be directly influential in causing death.

In the public discussions of the value of intra-uterine instruments, it has been painful to observe the levity with which the fatal results of their use have been descanted upon. These deadly consequences have generally been spoken of as mere negative results of the treatment,—as cases of failure. Some of the partisans of this method have even attempted to gloss these dire results, by pointing out that death is sometimes the result of treatment far less imposing in severity than this, and that deaths in general are wonderfully easily caused in some individuals. A French academician has distinguished himself by reaching the climax of this absurdity. While commenting on the mortality among M. Valleix's cases, he exclaimed, in the midst of the Academy of Medicine (and he was not answered), that five or six deaths,

in the treatment of 160 cases, of a disease which was always innocent of such results, was not of much importance,* and that the instruments are not dangerous! I have frequently heard it boasted of the British school of medicine, that opinions and practice such as that spoken of and defended by M. Velpeau would not for one moment be tolerated in the professional circles of our country. And I trust we shall never have much reason to defend our profession from the shame of similar views, or our fellow-citizens from being the victims of such practice.

It must not be forgotten, that a certain allowance must be made to the partizans, properly so called, of these intra-uterine instruments, in consideration of their very partizanship, of the novelty of the subject, and of the flattery of many patients and practitioners. Such influences have a wonderful power over most minds, in shutting out the true view of the cause of evil results, and of their importance. But a very little reflection will place the matter in a proper light for every one.

The *gravity and fatality of the disease treated* ought undoubtedly to determine the importance which we should attach to death as a result of treatment. The *severity of the treatment itself* ought to have no weight, unless such treatment have been used to test the powers of endurance of the subject of it.

Uterine displacements are described by those who attribute to them the greatest importance, as affections causing painful feelings of various kinds, and sometimes difficulty and pain in walking, defecation, urination, and menstruation. Fatal consequences are not attributed to them, unless in a very remote degree of indirectness. That such affections, then, should not be subjected to a plan of treatment which is unavoidably fatal in instances which are not extremely rare, is a proposition which requires only to be stated to command assent. And if this be admitted, it follows *a fortiori*, that a treatment which not only occasionally causes death, but frequently induces other diseases, equally bad with the original complaint, and, in any case, rarely if ever cures the displacement, cannot receive the sanction of the profession. If the treatment of uterine diseases by intra-uterine pes-

* M. Depaul a cité plusieurs cas malheureux de M. Valleix lui-même; sans doute il y a eu plusieurs cas malheureux, qui peuvent être attribués à une fausse manœuvre; mais, en définitive, 5 or 6 cas malheureux sur 160 observations, c'est fâcheux sans doute, mais ce n'est pas encore de nature à faire rejeter le moyen; et il resterait à démontrer, d'ailleurs, que les accidents dont il s'agit doivent réellement être imputés au redresseur.—SPEECH OF M. VELPEAU. *Gazette Médicale*, 8 Juillet 1854, p. 415. It is only just to M. Velpeau to add, that his own practice indicates very different opinions from those expressed in his speech. He himself desisted from using intra-uterine pessaries, long before they were known in Edinburgh, because *accidents* (not death) occurred in some of his cases.

saries comes within the scope of these propositions, then their condemnation is inevitable.

Fatal results, and numerous injurious consequences, have resulted, here and elsewhere, from intra-uterine instruments. This undoubted fact is sufficient to show the necessity for the most careful use of these instruments, and their restriction to cases of a serious description. But these fatal results and injurious consequences may not have been, or may not be, inevitable. They may not have been inevitable, but the results of unskilfulness, foolhardiness, or ignorance, or neglect of the conditions for the safe use of the instruments. They may not be inevitable, for experience and anxious care may teach us the conditions necessary for safety in the treatment.

A great body of the profession has already a decided opinion in regard to these instruments. Some reject them entirely as dangerous to life; some as frequently, if not invariably, inducing diseases at least equally distressing with that which they are proposed to remedy; others as being, to say the least, quite inefficacious.

I have already said, that if the question of death as a necessary occasional result of the treatment under discussion were decided in the affirmative, then the therapeutic applications of permanent intra-uterine pessaries would be easily limited. But it is necessary to notice some ingenious methods of concealing the force of this argument, adduced by the defenders of these instruments. It has frequently been argued that they were not dangerous, because in many cases they had been worn for months, or even years, without causing death, or any intolerable symptoms. But it is clear that this argument is good only for those cases. Such cases show that intra-uterine instruments may be long worn without fatal or dangerous results in certain cases; but they do not affect the argument of danger equally well demonstrated in the cases of death. There is no method of discovering beforehand which are the cases in which the instruments are to be safe, and which are not. Every case takes part in the risk. To use an illustration, the frequent successful amputations of the thigh, or excisions of the mamma, do not blind the eyes of surgeons to the dangers and fatality of these operations. If it were possible to predict in what cases the amputation or excision would not be fatal, then these operations might be applied to the treatment of the simply painful and not dangerous affections of the knee or breast. The same might be done, were it possible by any care or attention to ward off the fatal result. But surgeons are convinced that amputation of the thigh, and excision of the mamma, are operations which have a certain amount of necessary fatality. They therefore refuse to apply these operations to the treatment of affections of the knee or breast which are not in themselves dangerous to life, or productive of serious and

otherwise incurable suffering. It is evident, then, that remarkable endurance of the intra-uterine instruments in certain cases (just as successful amputations and excisions) does not of itself justify the use of these instruments in any case.

Another argument which has been often repeated in defence of intra-uterine instruments, requires only to be mentioned. It has been shown that a large number of these intra-uterine instruments have been purchased from a fortunate surgical cutler. This is exactly the point at which these instruments are of no therapeutic importance. It is not the display of them on the shopman's counter, nor the manipulation of them by purchasers, that is important. The amazement (or amusement) of the patient may be important; but what certainly is so, is their introduction and retention in the female passages, with their ultimate results.

It may here be useful to direct attention to the manner in which surgeons view the occurrence of death after one operation, in their discussions of the new remedy for stricture of the urethra. That disease is one of great danger, and having a very considerable fatality; yet the occasional occurrence of death from the operation has been urged as sufficient reason for its total abandonment, and all the energy of the supporters of the new method has been called out to defend it. But in the novel plans of treatment of uterine displacements, and of other simple and innocent uterine affections, the occasional occurrence of death seems with many to cause no question of their propriety, or even of the circumstances necessary to prevent in future like painful results. Similar remarks might be made as to the importance attached to injurious results, short of death, on the one hand, in the treatment of a very serious disease, namely, urethral stricture, and on the other, in the treatment of many uterine affections which are not dangerous.

Before concluding, I merely remark, that M. Dubois has attracted professional attention strongly to the opinion which he has expressed, that although these intra-uterine instruments do not cure displacement, they may, under certain circumstances, come to be of some use, either by modifying neuralgic conditions of the uterine cervix, as the catheter sometimes does in the urethra, or by inducing an acute inflammatory state of parts previously only engorged, with the hope that the subsidence of the acute inflammatory condition may cause the disappearance also of the engorgement, which is so often the real cause of symptoms attributed to displacement.

In another place (see *Edinburgh Medical and Surgical Journal* for July, 1854), I have expressed my own views as to the nature and treatment of uterine displacements. It yet remains for obstetricians to decide, whether or not intra-uterine instruments can be used with proper regard to

the patient's safety, and if so, what are the conditions under which they are to be recommended.—*Edinburgh Monthly Journ. of Med. Science.*

Water Dressing. By Geo. H. Hubbard, M. D.

The following cases are selected to illustrate the success attending the treatment of wounds with water. Although not of great importance as "interesting cases," if their publication can induce any one to abandon the burdensome and too often injurious appliances which have been customary in times gone by, and to substitute therefor the simple treatment by water, a mode of treatment sanctioned by the best surgeons of the present day, perhaps as much good may be accomplished as by a lengthy detail of more intricate and unusual diseases.

In some notes on "water," which I furnished for a previous volume of this Journal, I entered somewhat into the history of its use as a therapeutical agent. At this time I purpose only to give a few cases in proof of the propositions then advanced, that "water is our best dressing in wounds of all kinds."

Case I.—*Incised Wound of the Knee.*

D. P., age 18, made a mis-step while mowing, and in falling struck his knee on the scythe, which rested on the ground with its edge so inclined that the whole weight of his body came upon it at right angles. It was consequently forced into the limb as far as such a blow could drive a sharp edge into bone. The resulting, clean, incised wound severed the ligamentum patellæ, about midway of its length; not directly across, but obliquely, its internal angle being just one inch lower down the limb than the external. The wound was precisely four and seven-eighths inches in length. The capsule of the joint was opened by a clean incision, seven-eighths of an inch long at the external angle of the wound, and a piece of the head of the tibia was split off and slightly movable at the inner angle; but as it could not be removed without cutting it from the ligaments of the joint to which it was attached, it was placed in as good coäptation as possible, and allowed to remain.

When I reached the patient (about an hour after the injury), he was considerably depressed, perhaps as much, or more, from the fright which this gaping wound was calculated to produce, as from the injury. As no important branches of the anastomosing arteries were cut, the hæmorrhage was slight, and that from the small cutaneous vessels had nearly ceased on my arrival. The lower portion of the ligamentum patellæ, which protruded prominently from the wound, was, after removing some bits of grass,

brought into exact coaptation, and kept so by means of the twisted suture, consisting of three steel needles, deeply inserted, one and one-fourth inches apart. The limb was laid in a "Goodwin's splint," and kept perfectly extended.

The wound was dressed in *water*, and was never dry for twenty-five days. The temperature of the water was gradually raised after the expiration of ten days, and regulated by the sensations of the patient; keeping it just so cold as was agreeable. For the first week his diet was *water gruel*, afterward, additions were made, very gradually, so that he did not receive full liberty to eat as he chose, for five weeks.

After this wound was first dressed, he had "*no pain*," lost no sleep, and there was but little swelling about the wound. No fever occurred; the wound united by first intention, except a small hole which kept open at the inner angle for about five weeks; doubtless on account of injury done the bone at that point; but at the end of this time it was entirely healed. Two of the needles were removed on the eighteenth day, and the third on the twenty-first. On the fortieth day, he walked two miles with the aid of a small stick.

No medicine of any sort was at any time administered; the water was discontinued on the twenty-fifth day, and an envelop of cotton used to protect the knee both from injury and from cold.

At this time, fourteen months after the injury, he is walking without the aid of a cane, engaged in all sorts of farm-work, having rendered good service on the farm during the past season.

CASE II.

P. R., aged 20, while chopping wood, misguided his axe, and received its full force on the dorsum of the left foot. Taking a somewhat slanting direction it did not go through the foot, as a perpendicular blow of like momentum would have done, but split up portions of the tarsal and metatarsal bones; so that when I examined the foot, about an hour after, I introduced my fingers to the depth of an inch and a half, removing the clotted blood and some small fragments of bone which were entirely separated. The wound was strapped tightly with strips of linen wet with collodion, and a compress bound on to keep the split portions of bone in as good coäptation as possible. A splint, to keep the foot up so as to relax the muscles acting upon its anterior aspect, was used, as many of the extensor tendons were severed. This wound was dressed with "*water, and nothing else;*" was never dry for two weeks; the temperature was raised as the sensations of the patient indicated; it united by first intention throughout its whole extent; there was no suppuration; the bones seemed to unite as

readily as the integuments, and on the 28th day he went to his work with but slight lameness, from which he entirely recovered.

CASE III.

A girl, aged 10 years, tried her hand at chopping wood, and, from want of skill and strength, cut her foot severely. Upon examining the wound, I found the great toe nearly severed from the foot, hanging only by the skin, flexor tendons, and vessels of its inferior part. The metatarso-phalangeal articulation was laid entirely open, and the whole articulating surface of the metatarsal bone cut off and loose in the wound, from which it was removed by snipping with scissors some few ligamentous fibres which had escaped the axe. The wound was cleaned, and all loose portions of bone and clots of blood removed. When this was done, the bleeding, which had been profuse, ceased entirely. This wound was brought together by interrupted sutures, and the toe brought into as good shape as possible, and kept so by bandages. Water was the only application made, and to the surprise of all, no pain was felt, no sleep lost; the wound united by first intention, and she has a very good and serviceable toe. I am inclined to think excision of a joint was never more successful than in this case, nor the operation ever performed with a ruder instrument or less surgical skill.

CASE IV.

A man came to me, with a finger the knuckle joint of which he had brought in contact with a circular saw. I found a ragged wound, which had opened the joint and removed portions of cartilage from the articulating surfaces of the bones. After removing all loose substance, the wound was brought together and dressed with collodion and strips of linen. He was ordered to keep it constantly wet with water, of such temperature as was agreeable, with which direction he faithfully complied. I saw the finger occasionally; but as no inflammation or suppuration occurred, I had no more to do with the case, and the first dressings were not removed till the wound was cured. The finger was nearly as serviceable as ever, the joint being but slightly stiffened.—*New Hampshire Journal of Medicine.*

Eight cases of simple Intermittent, and six of Remittent Fever successfully treated by the exhibition of partially denarcotized Opium. By W. S. SINN, M. D., of Chili, Hancock county, Illinois.

By some, opium is highly extolled in periodical fevers for meliorating the cold stage; others have thought it operated most beneficially in the interim or the remission, and a few solitary cases have been trusted to that alone during the whole period of the disease. Perhaps there is no disease

that is as amenable to treatment, and its management so clearly pointed out, as that of paludal fever, that has been the subject of such various and widely diversified treatment. Every one knows that quinine is certainly and suddenly destructive to its progress, but something cheaper and newer is the ambition that inspires almost every one that is often called to treat it; for in districts where it prevails extensively, a small fortune in a short time is requisite to cover the expense of the prodigal dispenser of that drug.

The fact that led my mind to the foregoing treatment more particularly was, that when opium was given in combination with the cinchonic salts, that a less quantity of the latter was sufficient to defeat analogous cases in a shorter length of time, and in a manner I do not say *better*, but more satisfactory to myself and patients.

The manner in which I proceeded in the treatment of the afore-mentioned cases, was by cleaning the bowels with six grains of calomel, twenty to thirty grains of rhubarb, succeeding their administration in three doses two hours apart, with a small tablespoonful of castor-oil, and beginning as soon as the bowels were well freed of their superabundance of fecal matter, if no gastric distress was present, with two grains of ipecac. and from three to eight grains of partially denarcotized opium every six hours, no matter at what stage of the disease. If there was irritation in the primæ viæ, the ipecac. was withheld and the opium given solitary.

In every case sleep soon overcame the patient, the pains in the head and back as well as limbs were soon dissipated, copious diaphoresis was established, the circulation perfectly equalized, and in no case did a single chill occur after the medicine had been used twelve hours in the intermittent, and in the remittent by the third day in the longest instance, the disease had yielded and convalescence was safely pronounced. The vertigo, tinnitus aurium, produced by the quinine frequently, is entirely avoided, and the patient enjoys a semi-somnolent state during the time of taking medicine, and at the end of twenty-four or thirty hours slowly emerges from his torpid state, his appetite slowly returns, and so far there has been no case that has had a relapse; and in fact the patient does not appreciate his illness, for he has suffered none.

These cases were all in which I tried the opiate treatment, and these were selected from their simplicity, for they were such cases as one feels safe in persevering in experimentation.

From the treatment, I should have little fears in trying it in cases of gravity; but I would recommend any one to try it in milder cases, before trying it in those of a more dangerous form. I tried merely to save quinine, and I intend to still use it, as long as I am pleased with it, in such cases as the foregoing.—*Nashville Journ. of Med. and Surg.*

A Case of Penetrating Incised Wound of the Abdomen and Small Intestine, resulting in death from internal strangulation. By EDWARD HARTSHORNE, M. D.

The following report has been drawn up from notes taken by the writer nearly twelve years ago, while serving in the Pennsylvania Hospital as House Surgeon, under the superintendence of the late Dr. Randolph, who was then on duty as Attending Surgeon. It was thought to possess sufficient interest as an instance of peculiar homicidal injury, as well as uncommon termination of abdominal wound, to warrant its publication, even at this long interval, and notwithstanding the lack of clinical details to which we are condemned by the unfortunate meagreness of the only data now to be obtained.

Wm. Thomas, mulatto, aged 25, of rather slight frame but excellent previous health and temperate habits, was wounded in the abdomen with a sharp instrument, on the evening of the 13th of November, 1842.

He was brought to the Pennsylvania Hospital, where he was seen by the resident physician within forty-five minutes after the reception of the wound.

When first examined in the ward, he was lying on his back with his limbs extended, appeared to be entirely free from excitement, and exhibited no evidence of prostration or of any uneasiness, except some degree of pain and soreness in the injured part.

According to his own statement he chased his antagonist at least twenty paces, and struck him with a stick two or three times, after the infliction of the injury; he then ran some two hundred yards to an apothecary shop, where he first discovered the protrusion of his bowel. From this shop he was immediately conveyed, in a cab, some four or five hundred yards, to the hospital. The only sensation perceived at the moment when the knife entered his body, was that of a slight nausea. The man had eaten an ordinary supper and taken a glass of beer some three hours previous to the occurrence.

Uncovering the patient brought into view, resting in front of the abdomen and protruding from a wound in its parietes, a pulsating mass, which consisted of two loops of small intestine with their adjoining mesentery. The upper of these loops was about eight and the lower about twelve inches long; they were much darkened in color from venous engorgement, but clean, moist, and glistening, and appeared to be half filled with semi-fluid matter. The lacteals in the mesentery were distended with a white fluid, and resembled in size, shape, color, and abrupt termination, so many pieces of pack-thread.

The wound proved to be incised, an inch in length, and extending almost longitudinally downwards from about two inches and a half below and an inch to the left of the umbilicus, penetrating the rectus muscle in the direction of its fibres. Besides this, however, there existed on the outer surface of the most dependent portion of the lower loop, a transverse opening into its canal, at least eight lines in length, giving exit, on pressure, to alimentary matter mixed with blood, and presenting the clean edges, and characteristic everted mucous margins, of a penetrating incised wound of the intestines.

Notwithstanding the relaxation of the abdominal muscles by flexion of the thighs and elevation of the shoulders, the neck of the hernial tumor was so firmly constricted by the external wound, that safe reduction seemed impracticable without enlargement of the aperture. The incision in the abdominal wall was accordingly prolonged half an inch upwards, by means of a straight bistoury cutting from within outwards, and carefully guarded with a silver director, so as not to touch the peritoneum or other encroaching membranes. The stricture having been thus removed, the whole protruding bowel, except about two inches of its length, which included the wounded part, was gradually reduced. The intestinal wound, which, on account of its transverse direction and the protrusion of mucous lining, gave us little apprehension of extravasation, was now secured according to the plan of Jobert. This was effected with two sutures of fine, waxed-silk ligature, drawn through all the coats of the canal in such a manner as to bring into contact the outer surface of the peritoneal coat, along the whole length of the transverse opening, by turning in its edges like an ordinary seam. The ends of the ligatures were next cut off, and the wounded portion at once returned into the cavity. The closure of the external wound then remained to complete the dressing. Here, on account of the impossibility, in so small an opening, of suppressing the abdominal contents, which were constantly bulging up, it was out of the question, even if otherwise desirable, to pass a suture needle through the muscular parietes without incurring a great risk of puncturing the intestine. The margins of integument alone, therefore, were approximated with three sutures, and as many adhesive strips. A compress of lint was lastly applied over the wound and confined with a circular bandage, so as to prevent hernial protrusion, and enable the longitudinal muscular fibres to approach and unite with each other, if possible, by the first intention.

An opiate of sixty drops of laudanum was given to the patient before the dressing; and although the handling of the exposed parts, unavoidable in their replacement, appeared to occasion a good deal of pain, yet the operation was followed by immediate relief.

Not more than eight ounces of blood had been lost externally; and the

only symptom apparent when the man was left for the night, was some degree of soreness of the wound on pressure.

On the following day, November 14th, he presented the following condition. Pulse 96, pretty full and strong, with some head-ache, heat of skin and furred tongue; had slept but little through the night. Very slight meteorism with soreness on pressure around the wound. Bladder has been evacuated in bed without difficulty. No stool. He was bled twenty-four ounces, and directed to take Ant. et Pot. Tart. gr. 1-12th, in Mixt. Neutral. f. ℥ ss. q. h., and Cal. gr. ss., P. Opii gr. j., q. h. t., during the day. Barley-water diet. The bleeding removed the headache, and reduced his pulse in force and frequency. In the evening, the fever and pain were gone; meteorism no greater, and soreness around the wound unchanged. Omit the diaphoretic mixture, and suspend the Cal. and Op.

November 15th, A. M. Patient has slept well throughout the night, and is in good spirits. Pulse 84, soft, skin cool, expression of face good, tongue moist, and slightly furred. Tympanitis somewhat increased, with slight pain on pressure over the abdomen. He began to complain of violent pain in his bowels about noon of this day, at the same time that the tympanitis and tenderness were very much increased. The bandage was loosened, and Morph. Sulph. gr. ss. immediately administered; eight ounces of blood were taken from his arm, until he nearly fainted. The calomel and opium were directed to be given every two hours. Under the influence of the opiates and venesection, the pain moderated. In the evening, the tympanitis was found to be undiminished, and produced great discomfort, particularly in the upper half of the abdomen, which was much more distended than the lower. The pain, also, had again become violent. Ordered Cal. gr. iij. P. Opii. gr. ij. at once, the pills of cal. and op. to be resumed in two hours, and repeated every hour until pain is relieved or decidedly narcotized. Enemata of Ol. Terebinth. in Castile-soap suds were administered three times in the course of the night, and afforded relief by the expulsion of large amounts of flatus. A single ten-grain dose of assafœtida was exhibited in the hope of its relieving the stomach and upper intestines, but it only created nausea and vomiting, with hiccough and eructation.

Wednesday, 16th, A. M. Tympanitis still increasing, and now produces very great oppression. Tenderness on pressure, also, aggravated, especially just above the wound; although the latter looks remarkably well, and presents no evidence of protrusion. Countenance becoming anxious; nausea, hiccough, and vomiting more frequent, and pulse more decidedly depressed; leeches, warm fomentations, and anodyne enemata, were successively employed to no material purpose.

Stercoraceous vomiting made its appearance on the fifth day, and the

distension, pain, singultus, and other symptoms of internal strangulation continued to increase in violence, until the patient finally succumbed on the morning of December 20th, six days and six hours after the reception of the wound.

Autopsy, eleven hours after death.—The external aspect presented nothing worthy of especial note, except the very great distension of the upper two-thirds of the abdominal region. The wound in the integuments had cicatrized completely without any hernial protrusion.

In order to expose the abdominal contents as nearly as possible in situ, and without disturbing the relations of the wounded and otherwise altered parts, an oval incision was made through the parietes of this cavity along its costal margin above, down each side, and along the pelvic margin below. The portion of abdominal wall thus detached, was next carefully turned over at its circumference, so as to enable us to look beneath. We then ascertained the cause of strangulation to be an accidental overlapping of a knuckle of one of the hernial loops of small intestine over another portion of the same loop, the overlapping portion being closely bound down upon the other by bands of adhesive membrane, through which it had become attached to the parietal peritoneum in front.

The constriction thus produced was at least half an inch in length, and amounted to a complete occlusion of the alimentary canal. The small intestine was excessively distended as well as externally injected, and at the same time partially adherent in three or four transverse folds, some two-thirds of its length down to the seat of stricture. No distension present below this point. Inflammatory action nowhere very strongly marked, although more so than elsewhere across the whole cavity from two to three inches above the umbilicus down to within about three inches of the pubis. The folds of small intestine and the omentum occupying this region were slightly adherent together and to the peritoneum, and were studded with small patches of false membrane, which appeared to be more numerous and firm on the left side and about the wound, but by no means in such excess as to denote a fatal amount of peritonitis. The wounded part of the bowel was found entirely closed and firmly attached to the peritoneum about three inches above and one inch to the left of the external wound. No effusion of alimentary contents had taken place, nor had any undue inflammation been excited immediately around this spot. Upon separating the newly-formed adhesions, we discovered the sutures fastened to the inner surface of the peritoneum, and within the intestinal canal, into which they appeared to have just finished working their way. The wound in the rectus muscle appeared to have united, although some extravasated blood yet remained unabsorbed. No effusion of serum, and no separate flakes of lymph or traces of pus could be detected. Abdominal peritoneum slightly

mapped with fine arborescent injections, but not thickened or roughened except in the parts adjoining the folds and points of adherent bowel already described. Elsewhere, the evidence of inflammation was unimportant. Other organs of the body in each of the cavities were examined in detail, and found to be in perfect health.

The case presented in the foregoing sketch is interesting in many respects, but chiefly so on account of its termination in fatal incarceration or internal strangulation. This accident seems to be of rare occurrence, judging from the small number of analogous facts on record. It is certainly one of great importance in many of its relations, especially where the primary lesion is, as in the present instance, the result of criminal violence. The man who inflicted the original injury of which our patient was apparently the victim, was subsequently tried for his life upon the charge, and was very glad to escape with a long imprisonment for murder in the second degree. The medico-legal aspects of the case, together with some other considerations suggested by it, will form the subject of another communication, in which the writer hopes to present a resumé of a number of the published cases of similar character. He regrets that since the inquiry was suggested by the re-perusal of the notes upon which his own report is based, he has not yet found time to complete the extended references required for such a purpose.—*Medical Examiner.*

Observations upon the use of Sulphate of Quinine. By EDWARD MARTIN, M. D., New Orleans.

It is a singular fact in the history of all things destined to be of use to society, that they should cause a feeling of animosity against them almost proportionate to the services which they are calculated to render; and this, even, in a population which derives an almost daily benefit from them.

In no community is this law more evident than in Louisiana, where the practice of medicine would be impossible without the aid of cinchona and its alkaloids, and yet the prejudice against the use of sulphate of quinine is here carried to the highest degree. The reason is inexplicable. Ask anybody why he condemns its use, and he can specify no good reason; and yet such is his conviction. The terrible mortality which is seen during our epidemics, has struck the public mind with such terror that it is inclined, as unfortunately too often happens, to attribute the deaths to the substance most generally used in the disease, and not to consider them as the result of an unknown and mysterious complaint, which is often rapidly fatal in its termination. On this subject, allow me to have recourse to

your estimable journal to bring to public notice some practical facts which I have collected during two epidemics of yellow and pernicious fevers. From these it may be seen how the evil effects of quinine are sometimes improperly appreciated. We will first give a history of those cases in which quinine has been used in large doses.

[Dr. Martin gives the details of seven cases illustrative of this position, which are very interesting, but of which we can only afford to extract the following.—ED. A. M. M.]

Case 1. On the 26th of August, during the epidemic of 1853, Mr. A. St. M———, a young man, 22 years of age, of a good constitution, had been two years in New Orleans, was attacked with yellow fever. A *confrére* and myself treated him during his attack, and after ten days of severe fever, we commenced to allow him to take food. He was still in convalescence, when, the 23d of September, I was called again on account of a symptom, apparently slight, which impeded his recovery. Here is what had happened: The patient, after taking a light breakfast, mostly of underdone vegetables, had suffered from a heavy feeling in the region of the stomach, which lasted until the undigested food was rejected. A cup of weak tea had completely restored him, and when I called, which was two hours afterwards, I found him in perfect health. I therefore thought it a slight indisposition, and prescribed a strict diet. On the 24th, the next day, his father told me that he was suffering from the same disagreeable feeling in the epigastric region, although he had taken no food. I went to see him immediately, and while I was talking to the young man, who was in full possession of his faculties, and explaining to me the nature of his pain, he fell suddenly back upon his bed, and was seized with cramps in the arms and legs, and spasmodic contraction of the muscles. His face became of a dark blue color, and this, but of a lighter shade, pervaded the whole body. The pulse was thready and slow. I no longer doubted that I had before me a case of pernicious fever of an apoplectic type. This state of congestion lasted twenty seconds; but it was only after two minutes' application of cold water to the head and face, and of alcoholic frictions to the whole body, that the patient opened his eyes and recovered his senses, but still so stupefied that it was impossible to make him understand, or to obtain proper answers. This state lasted until the third paroxysm; the pulse became soft, and about eighty-five to the minute, vibrating peculiarly under the finger, and somewhat irregular. In a condition of so much danger, there was no time for hesitation. I prescribed a solution of seventy-two grains of sulphate of quinine in six ounces of water, to be taken in tablespoonful doses every half hour. I also called in consultation a medical friend. We agreed upon the diagnosis and treatment of the case. I saw the patient nearly every hour; the stupor still remained

to a certain degree; the pulse was full and soft, and from seventy to seventy-five beats per minute. At 8, P. M., intoxication by quinine manifested itself by simple deafness; at 10 o'clock, this had disappeared. A new paroxysm of agitation now ensued. Twenty grains of the quinine were given by enema, and one drachm in an eight-ounce solution, to be taken in tablespoonful doses every half hour; at midnight, these doses were given at intervals of an hour, and by six o'clock intoxication had taken place. Deafness was nearly complete; the sight was normal; the intellect as the day before. At 9 o'clock, there was extreme agitation, spasmodic movements of the limbs, and some contortions of the body. After a struggle of some minutes, during which all consciousness was lost, the patient recovered and became delirious; from this moment his sight was completely lost, and the pulse, which during the febrile state had been as high as ninety, fell to sixty, and remained so for ten days. Talkative delirium, which, however, did not prevent the patient from understanding our words, and repeating them for hours and hours, lasted five days. Large baths of cold water, with affusions on the head, repeated eight or ten times a day, cherry laurel water, given in large doses and continued for a long time, brought about a gradual amelioration in the delirium, which terminated finally on the sixth day. The amaurosis lasted longer; and one morning the patient informed me, during my visit, that he could see the blue color of the sky; the sight improved from day to day, without, however, becoming perfectly restored. At present, Mr. St. M—— attends to his business, seeing well, but being obliged to use colored glasses to protect his eyes, as the sensibility to light is yet very great.

Case 3. October 3, 1854, at 2, P. M., I was called to see Mr. H., suffering since the day before. During the preceding night, Mr. H. awoke chilled, and attributed his chill to a draught from an open window near his bed. The patient gave no clear account of what happened from this time to the morning following, when, notwithstanding he felt much indisposed, he left for his office, where he remained until a severe attack of fever obliged him to return to his home. When I saw him, he was in the following state: Face congested, intense headache, general lassitude, severe pain in the lumbar region, sensation of weight in the stomach, tongue white, smooth on its surface, thick, and of a blood-red color on the edges, where the teeth had left their impressions; the gums swollen and injected; pulse large and soft, 120 to the minute; and perspiring so much that the sheets were saturated. He was at times delirious, and complained incessantly of pain in the head and back. A purgative enema was ordered, and the following prescribed. A pill containing six grains sulph. quinine, and one-sixth of a grain of opium, which was to be given every half hour. After four had

been given, they were to be taken every two hours. I saw him again three hours afterwards; his condition had not changed. The three pills which he had taken had been rejected, and the fourth he retained with difficulty, on account of incessant nausea. I prescribed sinapisms to the inferior extremities, together with an application of dry cups, which were allowed to remain a considerable time, over the whole epigastric region and abdomen. The pills were continued every half hour. At 6 o'clock, I re-visited the patient; no change of importance had taken place, but he had retained six of the pills. By 8 o'clock, he had taken ten pills; the pulse holding up to one hundred and ten, and the intoxicating effects of the quinine but little marked. At this time a consultation was proposed, which I agreed to. Our ideas of the nature of the disease and the treatment were the same. We ordered thirty-six grains of the valerianate of quinine, divided into six pills, one to be taken every hour. At ten o'clock, the pulse was one hundred; perspiration continued free; the intoxicating effects of the quinine had augmented; at midnight this was complete, but the sight remained good; cephalalgia had diminished, although it yet remained to a slight degree; the pulse had fallen to ninety; the intervals in the administration of the pills were increased to two hours. At 3 o'clock in the morning, the phenomena produced by the quinine had disappeared; the pulse had risen to one hundred and twenty; headache and pain in the back less; the hearing good, and sight clear; the tongue dry and brownish in the centre, the edges red; some oppression about the stomach; respiration oppressed; skin dry and burning. I ordered him frictions over the surface of the body with the tincture of arnica and serpentaria, containing, moreover, sulphate of quinine, and an enema of fifteen grains of quinine every two hours, together with two pills, containing two grains of valerianate of quinine, every hour. At 8 o'clock, the pulse was at ninety; the skin dry and acrid; thirst intense; intoxication by quinine complete; the sight remained good. At 9 o'clock, the patient was seized with a general debility; the pulse fell to eighty; deafness had diminished, but sight was completely abolished. For two days the skin remained dry and burning, the pulse remaining at eighty; at the end of forty-eight hours hearing was almost entirely restored; the tongue red on its borders and whitish in its centre, as in the commencement of the attack; the gums scorbutic. A short time after this, the skin became slightly moist, and the patient began to convalesce; but complete amaurosis lasted six days; and now, the 22d of October, the patient is beginning again to see well.

Case 4. On the 29th of September, 1854, I was called to see Mr. F. N. D., a young man, aged 28 years, newly arrived in this city, lately taken sick; preöccupied for some time with the thought of yellow fever, caused

perhaps by the news of the sickness of a friend, the patient began to experience a feeling of general indisposition, which terminated in an access of fever, presenting the following phenomena: A chill of considerable duration was immediately followed by intense heat, succeeded by an abundant sweat. Each of these periods had been attended with severe pain in the lumbar region, which also extended higher up the back; a delirium of a peculiar character had followed the cold stage. This consisted in a continuous affirmation of the condition in which the patient thought himself. He was quite well, he said, and would be able to resume his occupation on the following day. This he repeated incessantly. The voice was so feeble that that it was almost impossible at times to hear him, and he was affected, moreover, with general debility. The pulse was one hundred, large and soft. I ordered a purgative enema, and thirty-six grains of valerianate of quinine in twelve pills; the first four were to be taken every quarter of an hour, the second four every half hour, and the third four every hour; frictions over the surface of the whole body with the tincture of cinchona. It was 10 o'clock in the evening when I made my first visit. The next morning I found the patient's skin was hot and dry; the pulse ninety, large, full, and soft; the tongue with reddened borders, but soft and moist; the gums injected with blood, and bordered with a whitish false membrane; deafness but little marked; sight perfectly clear; voice a little stronger, and the pain in the back almost gone; the stomach, on percussion, gave a clear sound. I ordered a bottle of Seidlitz powder in a pint of water, to be taken as a drink during the day; an ounce of powdered cinchona, divided in eight papers, one to be taken every hour. At 12 o'clock, the same condition of things existed; powders had been rejected. I had them replaced by twenty grains of valerianate of quinine, divided in twelve pills, one to be taken every half-hour. At 4 o'clock, the pulse had increased to an hundred and odd pulsations; a large sinapism was applied, which covered the chest and abdomen; and thirty grains of valerianate of quinine, in twelve powders, one of which was to be given every quarter of an hour until eight had been taken, the intervals between the doses to be then increased to one hour, with orders to renew the quantity for the rest of the night. Early the next day the effects of the quinine had manifested themselves to the degree I desired; the skin was dry, and had assumed a dark yellow tinge; the gums were more spongy than the day previous, and the tongue yet red; the deafness was considerable, but the pulse had diminished to sixty-five beats. From this time the patient took every two hours a pill, composed of extract of cinchona, two grains of sulphate of quinine and extract of valerian. For two days no change took place in the patient. I visited him every four hours. The fourth day, at 4 o'clock in the afternoon, some minutes before my visit,

he experienced the following phenomena, which I shall describe in his own words: "I felt," said he, "a sensation of heat in the stomach, which extended rapidly towards the chest and heart, producing a sensation of constriction about the throat, terminating at the head, and causing me to lose consciousness for more than a minute." The patient, on experiencing this feeling, had risen up in bed, in a state of extreme agitation, asked his nurse to open the windows to give him fresh air, and at the instant fell over on his bed. I arrived soon after this had taken place; the patient had recovered his senses, although he was yet stupefied. He complained of a difficulty in breathing, and of a weight at the epigastrium. I auscultated his chest, and percussed his abdomen. I found the respiratory murmur scarcely audible, and a dull sound over the stomach. Frictions with the alcoholic tincture of arnica and serpentaria excited the circulation throughout the body; the oppression passed away, little by little; a general perspiration manifested itself on the skin, and in an hour the patient had recovered his usual intelligence. During this occurrence, the pulse, which I had found on my arrival at ninety, gradually decreased to sixty-five; the next day convalescence began, and the patient was in a few days restored to complete health.

Case 7. The following facts came under my observation very recently. One of my own children, *æt.* 7, was attacked by fever of a double quotidian form—*sub-intrans.* This fever was somewhat influenced in its type by the epidemic; thus, the skin had a peculiar dryness, the gums were injected and covered by a white false membrane; the tongue was white in the centre with red edges; the pulse was over one hundred and forty. The attack had commenced in the morning, unpreceded by any cold stage; it continued until 4 o'clock, and then terminated in a slight perspiration, which had hardly set in before the febrile state commenced again. This latter continued during the whole night, ending in slight moisture of the skin, when the fever returned. My first prescription was for a purgative enema, in order to open the bowels, and immediately afterwards four grains of quinine were given by injection; this the patient retained for two hours. In the evening this was repeated; the injection was not rejected until late. During the night the child told me several times that his fingers and hands seemed very diminutive, and made several observations, showing that many objects around appeared to his mind to be diminished. As the fever was rather intense, I did not pay much attention to what he said, attributing it to cerebral excitement. The next morning, whilst waiting for a *confrére*, all medication was suspended; but at 10 o'clock I saw the patient again, and found him playing upon his bed, and they had permitted the daylight to enter into the room. Upon seeing me, he cried out, "*Mon Dieu*! Papa, how small you are!" These words awoke my attention to what had happened the preceding night; and I interrogated the child, to know whether all objects he saw produced upon him the same effect. He told me that

they did, but that this impression was only produced at the first moment, and that by degrees the objects resumed their natural size. This state lasted some hours longer, when it completely disappeared, although more quinine was administered to him by absorption and by the mouth.

I could easily cite cases analogous to the preceding; but my object being merely to call the attention of physicians to the effects of sulphate of quinine, administered at certain stages of simple or pernicious intermittent fevers, I confine myself to giving simply a synopsis of these cases; for the reader will remark that in these imperfect observations, I have spoken neither of the urine nor of the fœcal matter. I have wished simply to show that the fatality attendant upon our summer epidemics, which persons are so fond of attributing to the use of quinine, is but too often due to its insufficient or tardy employment. As for the occasional cases of amaurosis which have followed the administration of quinine, they should be attributed to the inopportune and premature application of powerful medicaments for the purpose of restoring sight.

Since its discovery it seems to have been the fate of cinchona to have always found warm friends, and equally ardent enemies. Sydenham and Morton have supported it with all their influence, while Baglivi, Ramazzini, Stahl, and Guncer overwhelmed it with their bitterest reproaches. Now, congestions of the brain, chronic effusions, injections of the mucous membranes, and the convulsions which accompany the fevers of warm and marshy countries, are every day attributed to the sulphate of quinine, by a population who are sustained in their belief by physicians, too little impressed with the dignity of their profession to fear the spreading and supporting of errors which tend to destroy the confidence and respect due to medicine.—*New Orleans Med. News & Hosp. Gazette.*

PART IV.—HOSPITAL RECORDS.

[This department is under the charge of, and compiled and written by, Henry Melville, M. D.]

Ward's Island.—It will perhaps be remembered that we, last month, recorded an operation for ligation of the femoral artery in a case of popliteal aneurism. It has been quite successful; the patient has suffered no constitutional disturbance; the natural heat has fully returned to the surface of the extremity, nor has there been any wasting of the tissues. The aneurismal sac, which had become filled and solid, is now being resorbed.

The case in which Chopart's operation was made for the removal of

sphacelated phalanges, has also healed and formed a good stump; although some apprehension appears to have been entertained as to the result, from the scanty allowance of integument in the flap, at the time of the operation.

Trepanning for the cure of Paralysis.—A healthy man, 30 years of age, was admitted with loss of the power of articulation, and of motion of the right side, of nearly five years' duration. The history of his case is as follows: He was wounded, by an iron rake, in the middle portion of the left parietal bone, and in close proximity to the longitudinal sinus, upwards of five years ago; there were present, at the time of the injury, all the usual symptoms of fracture, with depression; there had been no surgical interference, however, farther than the common dressing of the wound. After a short time, consciousness returned, and the muscles of the body became subservient to volition; he had, in fact, so far rallied as to be able to resume his usual avocations. After a period of about six months, however, symptoms of paralysis of the right side, and the organs of speech, began to manifest themselves, and had gradually been increasing up to the time of the operation. Examination revealed the existence of considerable depression of the fractured portions of bone, which accounted for these grave symptoms; the patient expressed a desire for surgical treatment, with the hope of arresting the progress of his malady. Accordingly, on the 18th ult., Dr. Carnochan removed two disks with the crown of the trephine, at the opposite terminations of the depressed portion; these were then connected by two linear incisions made with Hey's saw. The depressed portions were then removed. The *dura mater* was found intact and healthy. The depressed portion of bone infringed on the brain to the extent of a quarter of an inch. The immediate result of the operation was the restoration of articulation to such an extent that, after inspecting the removed portion of bone, he thanked the operator with distinctness and expressed himself as feeling relieved. Hitherto the aspect of the case has been very favorable, but within the last forty-eight hours he seems to flag. There has been no erysipelas of the parts implicated, the dura mater seems to be granulating kindly, and the wound altogether seems healthy, there has been no fever; and yet he does not appear to rally.

Extensive Stricture of the Urethra, with Fistula in Perineo.—This patient was the subject of stricture resulting from neglected gonorrhœa. There was also a fistula with several communicating sinuses. He had been operated on previously, about a year ago, but with unsuccessful results. Introducing a director through the fistulous opening into the urethra in the direction of the external meatus, a probe-pointed bistoury was carried into the urethra, and the fistula laid open, and the stricture divided in its course towards the urethral orifice. The director being then reversed, a similar incision was made towards the bladder. This is, in all essentials,

Syme's operation; but at this stage of the proceedings, Dr. Carnochan adopts a somewhat different course. He introduces a female catheter into the bladder, through the external wound made in the operation; he then introduces a gum elastic bougie through the urethral mouth along the tube and course of the divided stricture, up to and through the wound; so that there are two instruments employed, which are allowed to remain until granulation has commenced; they are then removed, and a catheter is introduced through the whole course of the urethra. He prefers this plan because he thinks the female catheter keeps up a better drainage of the bladder, and that the suppurative inflammation, induced by the presence of both instruments, permits a readier passage of the subsequent one and insures a greater chance of permanent patency. I confess that it seems to be a complication of procedure over the simple plan of introducing from the first a silver catheter through the whole course of the canal, and promoting the agglutination of the walls over this. This is the second case I have witnessed during the past year; the first being successful to the best of my knowledge, and the present case proceeding favorably.

Syme's operation through the ankle-joint.—This was a case originally of frost-bite, in which amputation through the tarsus had been performed by some other surgeon; but owing to a scarcity of flap, cicatrization had never been completed. The operation was performed in the usual manner, and a good flap was obtained from the heel. The case is progressing favorably.

Ptosis from paralysis of the "levator palpebræ superioris."—In this case Hunt's operation was preferred, a portion of the integument of the lid being removed, thus bringing it, when cicatrization shall be complete, under the influence of the occipito frontalis.

Stricture of the Rectum.—In this case the sphincter ani was divided, and the stricture partially so; a needle contrived for the purpose was then passed around the strictured portion of the gut, and the ends passing through the anus, were brought within the action of a cerneau; by this means it is sought to cut the stricture gradually through. It appears to me that it might be practicable, in cases where the stricture is situated within operative reach, to remove an ellipsoid portion, with the scissors, in a longitudinal direction through the strictured part, and allow this to heal slowly by granulation, the lips of the wound being kept apart by a plug or string of peas. The objections to such a course do not appear to be insurmountable, and might be obviated by tact and judgment.

Through the *kindness of friends*, the writer of these Reports learns that he is charged with *toadyism*, etc., in always giving so prominent a notice to the practice at Ward's Island, and particularly to the operations performed by Dr. Carnochan. Now, it is a matter of the greatest indifference to me, what the opinion entertained by those who do *not know me* in this *city*, may be; for it can only be by them entertained through igno-

rance or prejudice. But in order that the friends and subscribers to the MONTHLY at a distance, may know and appreciate the truth with respect to this apparent preference, I will state that Dr. Carnochan is the only one among the surgeons in New York, who, knowing the purpose of my visit to the various hospitals, has extended to me such courteous attention and facilities for observation, as would enable me to give satisfactory report, by becoming possessed of the facts of the case, and of witnessing the operation and its results. I have not hesitated to describe what *I saw* elsewhere, *as best I might*, and which I considered worthy of comment; but I cannot report a case correctly, without the benefit of information on all the points connected with it. I deem this explanation due to the interests of this Journal, not to the opinions of those who have condescended so far to notice my writings, as to give utterance to such a judgment on them.

Those who are devoting attention to opthalmological surgery, will be much interested by a visit to Dr. Glück's Clinique, at the Thirteenth street school. They will see the practical application of the recently-invented eye specula to the diagnosis of disease, very skillfully made, and clearly demonstrated. The Doctor has also performed some very neat plastic operations on the eyelids, and has been successful in restoring, by operation, a large power of vision in a case of double congenital cataract. I must not say more, however, or this too will be put down to puffing by the misinformed. I recommend such to verify the justice of my statements by a visit to the Doctor's clinique.

PART V.—EDITORIAL AND MISCELLANEOUS.

THE PROFESSION AND PROFESSIONAL EDUCATION.—In the September number of the MONTHLY we took an opportunity to lay before our readers some thoughts upon medical education. These have attracted the notice of several of our exchanges, and, together with other causes, have produced a renewal of the discussions upon medical education, its defects, and its remedies. We confess that neither constitutionally nor by education do we belong to the family of croakers, and ever incline to look upon the bright side of affairs. We have long held that there is in our own country abundant means for obtaining a superior medical education. All that is necessary is that these means shall be used diligently and faithfully; not with too much haste nor with too little diligence. A thorough preliminary education; methodical and careful study of the elementary branches, followed by equal care and method in the more advanced pupilage; a habit of

study and observation in the earliest years of practice, whether in hospitals or in private, will do more to arm a man with knowledge necessary to combat disease, than ten years spent in the rollicking life of a medical student in London or Paris.

Still, we know that very many of the profession look upon this same subject very differently. The education of Europe, whether English or Continental, is regarded as excellence; and all that comes short of this, is rudimentary; and all that differs from this, is wrong. It is to be regretted that this is so, for many reasons. To our own mind, a strong national view of the whole subject is the first step to be taken, if we would walk in the way of improvement. Perfection in education, we do not claim to have attained. But while we confess our faults, we do not admit perfection elsewhere.

In the article to which we have before referred, we alluded to the prejudices with which young men especially are apt to return from Europe. Dazzled by the glitter and *éclat* attending the names of the great men of the capitals, their eyes see elsewhere only darkness. Hence, they worship these masters, and are deaf to all other wisdom. Repeatedly have such effects been seen to follow a European sojourn; and than this nothing can be more unfortunate to the young practitioner.

We can see no reason why there should not be acknowledged to be an American as well as an English or French or German school of medicine. The great principles of our science must be everywhere the same; but climate, custom, and other circumstances, produce in all countries peculiarities. Those of America must be learned here, not abroad. And then, the distinction which should attend our own great doers and great writers ought to be cordially granted to them. Why should we wait for the judgment of some other fallible mortal on the achievements of our physicians, because he holds a position in an old hospital of Europe? Such men have too often committed gross blunders, and have too often denied the possibility of every-day practices, for us tamely to acquiesce in or slavishly wait for their decisions. Our opinions should be formed calmly and with consideration, and then should be maintained as calmly, oppose them who may. Our physicians, our surgeons, our obstetricians, men, in all and every department, have achieved too much not to entitle us to assert as properly, and as successfully, our professional as our political liberty.

Such a decided and determined national, American view of the whole subject of medical education is, we repeat it, to our own mind the first step towards any reform. The opportunities which our country offers for professional study should be well considered and duly estimated. The conditions as to means and time at the command of the generality of students, should be weighed; the excellencies as well as the defects of our present system should be properly appreciated, and then can something be arrived

at which, by its adaptation to the circumstances of the country, will command the attention and the approval of the profession. Till this is done, we apprehend that all attempts at amendment will be only empirical.

We have before us four papers touching upon these subjects, and could readily turn to more. One of these is from St. Louis; the other three are from Virginia. Of the latter, we give one from the "Virginia Medical and Surgical Journal" entire, because we approve of its sentiments, and believe that it will aid in that self-appreciation which we ought to have. It may perhaps be worth while to say, that this publication is inferior to none in ability and independence.

Another is in the "Stethoscope," and is not marked either by ability or courteousness. Still, it is a good resumé of the action of the National Association upon this subject, and of the opinions of those who lay all defects at the doors of the schools.

The third is the report on this subject made to the Association by Dr. Cabell, of the University of Virginia, and which now first reaches the profession in the Transactions. It is not now possible for us to review it completely, and we will not do it partially, though we cannot refrain from saying that, in our opinion, it is one of the ablest and most scholarlike productions which have been published by this body, and will do much to the elucidation of this vexed question.

All of these papers show that this topic is exciting a deep interest, not only in Virginia, but throughout the country, and, with other indications, prove that the majority of the professors in our schools are ready and willing to lend their aid to any real improvement, and to assist in any plan which will give substantial progress. In this spirit, if it is met with an equally unselfish spirit on the part of the profession at large, we see a harbinger of good to our own body and to humanity.

But we too long detain our readers from the article of which we before spoke, to the general doctrines of which we give our entire consent.

"It is much the fashion, now-a-days, to decry the medical men of the present time, and awful lamentations are often heard in certain quarters over the degeneracy of the profession. Comparisons are drawn between this generation and the one which preceded it, and sad prophecies are uttered as to the inevitable tendency, under the present arrangement of things, to a complete loss on the part of the profession, of that high and dignified position in the eyes of the community which it once held

There is surely no better way of arriving at this result than the continual repetition of these jeremiads at every meeting of the profession, whether the National Association, the state societies, or the local organizations. The public hear of this charge coming from such high quarters, until, very naturally, they think it true. If all the sea-captains in the Union were to meet in solemn conclave, and declare that they knew nothing of navigation, very few persons would be disposed to trust their lives in their hands; and thus our so-called medical reformers, who are the principal agents in send-

ing abroad this impression, ought not to be surprised if the public, so often warned against the inefficiency of the present generation of medical men, should appeal to quackery for that aid which they have been taught to believe cannot be obtained in a more legitimate way.

It is full time that this matter should be noticed, and its evil tendencies checked. The young medical men must no longer sit still and permit this degrading imputation to be cast upon them. We deny the charge, and make the statement unhesitatingly, that the public is, at this time, better served with medical aid, and the profession, as a class, is better able to give them all the advantages of the science, than it ever has been.

The cause of this woful deficiency is generally attributed to the defective condition of medical education, the number of medical schools, and the facility with which everybody is admitted into the profession.

It has been shrewdly suspected that some of these reformers who preach crusades against the medical schools, are like the hungry ass, who, in the dust and confusion of the public road, puts his head over the enclosure, and seeing the grassy pastures and comfortable stalls of a popular college, betrays, with a borborygmic rumble, the emptiness of his stomach. Quoth he, "There are no greater asses than I am," and his sonorous bray of defiance rings through the land. In other words, it is a contest between the outs and the ins. Those who are out are very radical; they want reform. They who are in are well satisfied with things as they are; and the science is neither advanced nor retarded by this struggle for place.

We grant that medical education in this country is defective. We would like to think it possible, in the present condition of things, to improve it, and yet we believe it will work its own cure. It is true that the profession is rapidly increasing in numbers; the tide is swelling every year, and the ranks are filled to overflowing. Where there used to be one physician, there are now ten. Ten brains are at work in the prosecution of the practice of medicine, and they, too, fired with the fierce competition around them, straining every nerve to command success. Does the public lose any thing by this? So great is the press, that the young aspirant is *obliged* to struggle with all his might tosucc eed in his profession. The public have an opportunity of selecting from amongst many; they learn to discriminate; and though oftentimes the intriguer aud trickster gains an ephemeral reputation, the stern common sense of the people eventually and surely brings him to exposure.

So far from losing position and degenerating into ignorance and apathy, the medical mind of this country was never so active as at the present moment. The contest is tremendous, and the competition increasing daily. Go through this State, and contrast the country practitioner with his predecessor. See the number of ambitious young men who are there devoting themselves to their profession heart and soul,—for without this devotion, they will be left behind in the race,—and say no more that we are not as good as our fathers; it is not so.

Again, we ask attention to the medical literature of the present day. The medical press is teeming with new books, our table literally groans with the publications, original and translated, which are issued by our large publishing houses. Do they print books unless they know that they will find purchasers? Ask Professor Dunglison or Dr. Meigs if their books are not read, or inquire of Blanchard and Lea if medical books don't pay.

The periodical literature of the science is another evidence of the great activity of the medical mind. More than forty medical journals are issued in the United States, and largely supported by this much-abused profession. In the far west, where the echo of the Indian war-whoop has hardly ceased, we can find a medical paper, with translations from the French and German authors, and oftentimes sensible and original contributions from these degenerate sons of Hippocrates. The steamers are crowded with them, spending the first fruits of their hard labors on a visit to Paris, so that they may be better worthy of public confidence, and make up for those deficiencies in their early education which they now are aware of.

It is time for these things to be talked of frankly and acted on boldly, by the young school of medicine. The false impressions which are thrown abroad, tincturing the public mind, must be met and confuted. Their personal reputation demands it; the dignity and honor of the profession claim it at their hands."

ACADEMY OF MEDICINE.—The November meeting of this society is the occasion for the delivery of the annual oration. This year the oration was postponed from the first to the second of the month, when it was delivered at the lecture room in Clinton Hall, by Dr. J. H. Griscom. His subject was the relative duties of the medical profession and the public—one sufficiently hackneyed to be dull, but which by his manner of treating it, he made quite otherwise. As the oration will, no doubt, be printed, we abstain from giving a synopsis of it, which might do it injustice.

Some steps were taken by the society towards dividing itself into sections for the discussion and examination in each of separate topics pertaining to medicine. This amounts to a division of the whole body into committees on various subjects, with what practical results cannot now be said. The name of this society seems a little unfortunate, compelling, as it does, a comparison to the learned Academy of Paris. Diligence, however, and labor may make this, in time, worthy of a comparison with that; but only great diligence and continued labor can accomplish it.

ANNUAL MEETING OF THE NEW YORK SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—This anniversary was celebrated by a dinner at the Astor House. About one hundred and twenty-five sat down to tables well loaded with the substantials and delicacies of the season. After due discussion of these, time being allowed for the slowest to reach the bottom of the bill of fare, the more intellectual part commenced. It is not our province to give a detailed account of all that was said and done. The following statement by the treasurer will, however, command attention:—

Annual Statement.—The Society was instituted in 1842, and the capital is now $16,268 79. The investments amount to $16,200, and are in

bonds and mortgages, six in number, in sums of $4,000, two of $3,000, $2,400, $2,000, $1,800, all bearing interest at 7 per cent.; leaving a small balance of $68 79 in the hands of the treasurer. The loans are, without exception, on improved property in this city, and (one in) Brooklyn; the ground in every instance being worth the amount of the mortgage, without regard to the improvements thereon, which are insured and policy assigned. The receipts for the past year, from every source, were, from donations, $243; initiation fees and annual subscribers, $380; life subscribers, $160; interest, $1,014 15; total, $1,797 15;—and the disbursements, $318 25. The Society continues to carry out the benevolent purposes of its organization, in the family of one of its late members. Two gentlemen have joined the Society within the past year; and sixteen members have died since its organization. The present number of members is eighty-two, of whom forty-two are life members, by the payment of $100 at one time; and forty annual, pay $10 a year. The benefactors, constituted by the payment of $150 or upwards, have increased to nine, and three laymen are in the number. The Society pays money only to those widows who are left with a smaller sum than the interest of three thousand dollars, so that though its assistance is not great to any one, it is afforded to those who bitterly need it.

During the evening, contributions were announced from a number of gentlemen, and there must have been a perceptible increase in the funds. Such a charity, carefully conducted, is an honor to any profession or people.

The Citizens of Savannah and their Physicians.—It is not very often that an opportunity occurs of chronicling such an incident as the following. All our readers remember the sad accounts which reached us during the last summer, of the desolation of Savannah by yellow fever. Not only did the physicians of the city remain at their posts—some even dying in the discharge of their duties—but professional assistance was volunteered from Mobile and New Orleans. In estimation of the valuable services rendered by them, at a large meeting held on the 14th of October, after the cessation of the epidemic, the following were the proceedings. John E. Ward, Esq., the Mayor of the city presided.

Drs. Redwood and Hamilton, of Mobile, and Dr. Cross, of New Orleans, were, by resolution, invited to be present; and on their appearance, the Mayor, in a most eloquent address, expressed to them the deep gratitude of the citizens of Savannah for the noble and heroic service rendered by them during the late epidemic, and presented to each of them, in the name of the city, a service of plate, as some small token of the kind feeling of the people of the city toward them.

On motion of Dr. Screven, the following resolutions were unanimously adopted:—

Resolved, That the warmest acknowledgments of thankfulness are due, and are hereby tendered by the citizens of Savannah, in town meeting assembled, to the resident physicians of this city, who, undismayed by the peril of their valuable lives, have faithfully discharged their arduous and

dangerous duties; to those transient physicians, who, with self-sacrificing devotion, volunteered, and gave their services to the sick, and to all corporate bodies, charitable associations, and other associations and individuals, who have manifested their sympathy in our afflictions, by contributing in any manner to the relief of the sufferers by the epidemic with which this city has been visited.

Resolved, That the thanks of every citizen are due to the clergy of our city, who have, without an exception, been true to their holy calling, ministering at all times to the wants of the sick, and comforting the afflicted.

Resolved, That the citizens of Savannah will erect a suitable monument, commemorative of those gallant and ever-to-be-lamented physicians who have fallen in our midst, in the faithful discharge of their perilous duties.

On motion, it was resolved, that a committee be appointed by the chairman, consisting of such number as he may deem advisable, to carry into effect the last resolution.

BLANCARD'S PILLS.—The difficulty of procuring the iodide of iron in such a way that decomposition should not take place, has long been felt by the profession. These pills are intended to remedy this. The statement of the maker is that each pill contains one grain of iodide of iron, and one-fifth of a grain of finely powdered iron, all enveloped in balsam of Tolu. They are uniform in shape and size, and have but little odor. We have no experience in their use; but having received the sanction of the French Academy they come to us with a recommendation which entitles them to a trial. Should they prove to be all that is hoped, they will constitute a valuable addition to our pharmaceutical preparations.

PHYSICIAN'S VISITING LIST.—This useful little book is almost a matter of necessity to all doctors. Its prompt appearance for next year shows that a large demand is anticipated, and those wishing copies should supply themselves at once.

THE CLAMP SUTURE IN CLEFT PALATE.—We recently witnessed an operation for this affection by Dr. J. Marion Sims, of this city, in which he used this peculiar method of suture. The case was a bad one; articulation very indistinct, and deglutition of fluids frequently attended by regurgitation through the nostrils. The clamp suture, composed of very fine silver wire, fastened to small leaden cross-bars, will remain innocuously in the tissues for an almost indefinite period, which constitutes its great superiority over any other suture. In this case the clamps were removed on the sixth day—the cure was perfect.

This is not, by any means, the first case of the sort in which Dr. Sims has applied this suture with success; and it is our opinion that the operation of staphyloraphy, by this method, will never fail, if properly performed.

It is well known that difficult and tedious labor sometimes results in the most deplorable injuries to the mother: such as laceration of the perineum bladder, or bowel, and that these affections were wholly incurable till the introduction of the clamp suture by Dr. Sims. It is no wonder, then, that the Profession, both in Europe and America, unite in according to him the highest praise for this great boon to science and to suffering humanity. And now, since he has demonstrated the easy curability of cleft palate by the same means, we cannot but hail it with delight as another triumph of American Surgery. G.

Novel Mode of Opening an Ovarian Cyst.—Dr. Sims, of this city, has recently performed this operation in a mode which is new and which seems to possess several excellencies. A trocar, fifteen inches in length, curved so as to be the arc of a circle of four and a half inches radius, was, with its canula, inserted at the usual place of tapping in abdominal dropsy. After a portion of the fluid was drawn off, the point of the trocar was drawn within the canula, which, after several attempts, was finally carried to the cul-de sac, between the uterus and rectum; and when felt there by the finger in the vagina, the trocar was again protruded, the sac and the vagina perforated, and the extremity of the canula brought out between the labia majora; thus, in fact, transfixing the patient. A self-retaining catheter was then attached to the canula, and drawn into the ovarian sac, where, being separated from the canula, it was secured within the sac. The canula was then withdrawn, and the external opening closed. In this way the contents of the cyst were allowed to drain entirely away, and it is hoped that obliteration of the sac and the cure of the patient, will be the result. At our present writing, nearly three weeks after the operation, she is going on well.

Ophthalmic Surgery.—The study of this speciality is almost a matter of necessity to those who are compelled to practice all portions of our art. In the European schools a separate course is provided for this department, and requiring, as it does, delicacy and exact discrimination in the diagnosis and in the frequently required operations, nothing can be more reasonable than that a portion of time should be especially devoted to it. Among the many facilities for this study which our city offers, none are superior to those offered by our friend Dr. Glück, whose advertisement is found in this number, and whose valuable clinical lectures have, by their publication in our pages, elicited great praise for their author. Dr. G. was educated at Vienna, under Jæger and Rosas, and has industriously followed Sichel and Desmarres at Paris. Being a Hungarian, and having rendered efficient services as surgeon to his nation's army, he became an exile for his love of

liberty. Passing several years in London, he there was associated with Guthrie and the other eminent oculists of the city, and thus brings to his pupils the results, not only of a long experience himself, but of an extensive observation of the practice of the most distinguished teachers of this department. We earnestly advise students and practitioners to avail themselves of this opportunity of making themselves familiar with this department.

STATE AND MUNICIPAL MEDICAL OFFICES.—It is to be regretted that the distribution of patronage in offices requiring medical men as executives, should be made so completely subservient to political partizanship as is the case at present. Can it be possible that a man whose time and attention must be given, as a means of qualification, to the constant and exciting business of political intrigue, can devote his attention to the study, observation, and acquisition of practical experience, absolutely indispensable to the proper discharge of those professional duties which, on appointment, he will be called on to perform? Duties which involve the welfare of the whole community; which call for a comprehensive acquaintance with the widest range of medical philosophy, which can be acquired only by large opportunities of investigation, careful analysis, great thought and reflection, much and judicious reading, and a watchful and minute comparison of the records of all nations. Yet these are the elements of fitness for such a position as that of Health Officer to a populous city like New York—the focus of foreign immigration—the *centrum radiorum* of population to an extended area of country.

Is it wise to stimulate the desire for political controversy and polemics in minds which ought to be entirely devoted to the no less intricate and certainly more valuable study of public hygeine, medical statistics, and climatic influences?

Is it just to distribute the prizes for high scientific acquirements, personal zeal and devotion to professional duties, individual merit and need, upon subservient partizans, whose claim rests principally on their activity in a course foreign to their professional avocations, and entirely opposed to the successful pursuit of medical science?

These interrogatories are addressed respectfully to those who exercise the distributive prerogative. Let wisdom, prudence, and justice regulate the choice to be made in all those offices now to be filled by medical men, and we shall be satisfied. Let professional and personal merit alone be the guide for selection. Discountenance the prejudicial system of making political influence and zeal the determining qualities, where practical knowledge, enlarged views, scientific reputation, and independent opinion, ought alone to decide.

Nor is it only to those in whom the power of appointment lies, that we address our remarks.

It is customary among the profession to prepare and forward to the dispensers of patronage recommendatory memorials of candidates. Let this be done cautiously and, if possible, unanimously. Let the world see and feel that we at least believe in something beyond sectional politics—that we regard the public welfare as of higher importance than individual success, and that we are determined to give our suffrage to knowledge, experience, and aptitude, irrespective of every other consideration. The responsibility of making an improper appointment will then rest entirely with those who abuse their prerogative in opposition to competent judgment.

Not that we would be supposed to imply that medical men should abstain from exercising their political privileges and franchise. As citizens they owe it as a matter of obligation to their country to discharge these functions to the best of their judgment and information; but beyond this, they will generally find it a losing game to become engaged in the turmoil and responsibilities of partizanship, notwithstanding the tempting bait held out in the lucrative emoluments of Health Officer, and other similar posts.

‡

Proceedings of Medical Societies.—There are in this city a considerable number of Medical Societies, some of them strictly private and limited in their numbers, others more extended and public. Of all which we have had an opportunity of attending, we do not hesitate to give the preference, in all desirable respects, to the Pathological Society. Vigorous and prospering, its sessions every other week are characterized by a degree of interest on the part of all its members, which cannot but exert a beneficial influence upon all within its reach. The Academy, which is larger in its numbers, stands next in its influence on the profession. There is about its sessions a certain stately dignity which undoubtedly impresses strangers, though not always very favorably; but a dearth of those elements which alone render such associations profitable, occasionally suggests the trite quotation, "*Stat nominis umbra.*" A certain term of residence in the city is a prerequisite to election, so that this is hardly a portion of the *republic* of science, in which all men are free and equal.

The names of others indicate their aims. Among them are the Microscopical, the Statistical, and the Therapeutical Societies, each laboring in its particular field, and all possessing good reputations.

The doings of these various bodies are usually of some interest to the profession generally, and it is our purpose in the next number, the com-

mencement of the third volume of the MONTHLY, to devote one part to their reports. These we shall obtain, wherever it is possible, from official sources; but when it is not, must use other means in those societies to which we may have access. The endeavor will always be to give a fair, impartial, and accurate report, and neither care nor diligence will be wanting to accomplish this. Any assistance, however, which may be rendered to us by secretaries or others, will be gratefully appreciated.

ADDENDUM.—By accident, in Dr. Gardner's "Case of Abscess of the Rectum succeeding Child-birth," upon page 338 of this volume, the post-mortem appearances were omitted, which we here subjoin.

Postmortem, 4 o'clock P. M., made by Drs. Lidell and H. W. Brown. Body exceedingly emaciated. The abdomen alone was opened. An abscess was found, opening into the rectum on the left side, of an irregular shape, as if several smaller ones had united, and in the total capable of containing two or three ounces. There was considerable thickening and injection of the rectum and sigmoid flexure, but no ulceration or other active disease. The bladder showed a dark spot, as if a slough was in formation, of the size of a white bean. The *meatus urinarius* thickened and inflamed. The kidneys were decidedly far advanced with Bright's disease. The liver fatty. The stomach filled with grumous matter, but showing no lesion.

ASYLUM FOR INEBRIATES.—No class so well understands the advantages of and necessity for such an institution, as physicians. By their advice, legislatures have frequently been solicited to found them; and the whole profession will be glad to see any thing which seems to indicate that there is some earnestness in the effort now making to establish one. We, therefore, give without hesitation or contraction, the report of the directors, and their appeal to the public:—

WE, the undersigned, appointed by the Legislature of the State of New York to organize an institution to be known as "The United States Inebriate Asylum, and to act as Commissioners to receive subscriptions to the capital stock of said Asylum," do herewith submit to the public the following statement:

The object of this institution is to provide an asylum for the poor and destitute inebriate, where his physical and moral condition will be alike the care of the physician and the philanthropist, and where his labor may be rendered productive and of service to his family. With the asylum there will be connected work-shops, in which each patient, as soon as his condition will permit, will be regularly employed—thus making the asylum a self-

supporting institution. It will be seen that the community will thus be relieved of the burden of maintaining inebriates in almshouses and prisons; who will be separated from the society of those incarcerated for public crimes, and placed where their inebriety will be treated as a *disease*, and where no efforts will be wanting to produce in them a thorough reformation; and where an income from their labor will be secured to their families, who otherwise would be left to penury and suffering. To carry out successfully the great aim of the institution, $50,000 must be raised; this being the amount of capital stock required by the charter. This amount, which can be increased when necessary, is divided into shares of $10 each. Any person wishing to subscribe to the capital stock, can send his name, with the amount he will take, to any one of the directors.

We think it judicious to lease a building or buildings (until suitable edifices can be erected) for the purpose of entering at once, or as soon as practicable, upon the work for which the charter was granted. In accordance with a provision in the act of incorporation, there will be a report on the third Wednesday of January in each year, of the proceedings, expenditures, income, and condition of the Asylum, verified by the affidavits of the President and Treasurer, which report must be filed in the office of the Secretary of State.

In regard to the necessity of an institution of this character, we cite no less authority than Dr. BENJAMIN RUSH:

"To the account of physical remedies," he says, "I add one more, viz. The establishment of a hospital in every city and town in the United States for the exclusive purpose of hard drinkers. They are as much the objects of public humanity and charity as mad people. They are indeed more hurtful to society than most of the deranged patients of a common hospital would be if they were set at liberty."

We are happy in giving assurance that this enterprise meets with the approbation and encouragement of many of the most intelligent and philanthropic members of the community. The directors put forth this brief statement of their object and plan of operations, with the expectation of meeting a quick and cordial response from the benevolent of this and other sections of the country. The call for sympathy and material aid in laying a permanent basis of an institution that promises much for the recovery and salvation of a large number of the human brotherhood, we are confident will not be unheeded.

This institution is not designed to conflict with any other method for recovering the inebriate. There is nothing, we believe, similar to it, in this or in any other country. Thousands will look to it for help, and help they should and must have. That which was worth creating is worth preserving. The benevolent Father puts it in our power to save those who are ready to perish. To rescue a fellow-being from physical and spiritual thraldom, is worthy of the exercise of the highest talent and of the purest love. To redeem from ruin is greater than to create. To turn one from vice to purity, from darkness to light, from death to life, to make him the possessor of a free, enlarged, and beautified existence, is a divine mission. Everywhere goes up the wail of wrecked humanity, of prostrate and suffering brothers. From every side comes the cry for help. They are the true workers who respond to this cry. They are enriched in giving, and blessed in blessing.

Fellow citizens, Fathers, Brothers, and Sisters! Give us your aid in this branch of beneficence; and the blessing of multitudes will be your reward.

Hon. WASHINGTON HUNT, Lockport,
G. P. PARKER,
Hon. E. A. LAMBERT,
ANSON G. PHELPS.
J. D. WRIGHT,
JACOB S. MILLER, M. D.,
NEWELL A. PRINCE,
JEREMIAH TERBELL,
C. C. NORTH,
ROBERT C. EMBREE,
ALFRED BRUSH,
HENRY DUBOIS,
NOAH WORRALL,
G. B. ALVORD,
Hon. E. R. MORGAN,
Hon. ZADOC PRATT, Prattsville,
J. EDWARD TURNER, M. D.

ITEMS OF MEDICAL NEWS.

Dr. JOHN E. STOCKS, one of the most promising of the botanists of India, has lately died, in England. In 1853 he brought home to England a very valuable herbarium of Bombay plants. Another distinguished botanist, P. B. Webb, died suddenly, not long since, in Paris. He possessed one of the largest private herbaria in Europe. He had travelled for scientific research in the Mediterranean regions, Spain, Italy, and the Canary Islands. He was joint author with BERTHELDT of the History of the Canary Islands.

Several cases are reported in the foreign papers of fatal cholera, brought on by taking medicines purchased of grocers as "certain cures." Legal investigations into some of these have been instituted.

Dr. FRANCIS WRIGHTSON, after giving an analysis of the *Sewerage Products* of Birmingham and other towns in England, suggests that the immunity from epidemics enjoyed by that town, may be owing to the large quantities of the oxides of lime and other metals diffused through the atmosphere from the chimneys of its various manufactories. These, he thinks, may combine with the various miasmatic vapors and gases so as to form harmless compounds.

At the 24th annual meeting of the British Association for the Advancement of Science, held at Liverpool, in September, Dr. INMANN said that he had met in one of the Liverpool hospitals a *black man* whose hands were white, and whose legs had become as white as any white man's. He had been treated with mercury while in China, some eighteen months before, and suffered sharply from rheumatism. Soon after, the white spots began to appear. On his face, too, white spots appeared during cold weather, but in summer a darker skin covered them. Dr. CARPENTER narrated the well-known case of an American negro turning white. Such cases are not rare among the negroes of the Southern States and the West Indies.

The editor of the Dublin Medical Press, true to his nationality, entitles a case of bayonet wound, a case of "bad gunshot wound." ‡‡

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